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CANADA

MEDICAL AND SURGICAL JOURNAL

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CANADA

MEDICAL AND SURGICAL JOURNAL.

July 1872

ORIGINAL COMMUNICATIONS.

A Case of Paralysis with Aphasia occurring on the Fifth Day after Parturition—Death and Post Mortem. By JOHN REDDY, M.D., L.R.C.S.I., &c., Physician to the Montreal General Hospital, &c.

I wish to supplement a paper read by me before the Medico Chirurgical Society of Montreal, on the 9th March last, on Paralysis with Aphasia, (when I gave the history of four cases,) by recording another case which has since come under my charge, and which I deem of sufficient interest to lay before your readers, particularly since, as it terminated fatally, I had an opportunity of verifying the diagnosis by a post mortem. It bears a most striking resemblance in some of its pathological features to Case No. 1 in my former paper.

Mrs. M., aged 45, of middle stature and spare habit, I confined on the 17th April, 1872, of a large male child. The labor was of short duration, terminating favorably—(this was her seventh labor). On the second day she remarked that before her confinement she had been much troubled with a cough which had now nearly altogether subsided. On the third day the breasts were well filled and the child nursed freely; she appeared in good spirits, nor did anything unusual arise to affect her perfect recovery till the morning of the 22nd (or fifth day), when, on my arrival, the nurse informed me that some short time previously she awoke, as if in a fit or dreamy fright; her face was quite distorted; the ability to speak or sit up being absent; that when the fright had subsided she was seized with coughing, and forced up quite a quantity of thick saliva which flowed from her mouth; up to this moment she appeared to be doing well, and had spoken to her a short time previously. I found her lying on the right side, partially propped up in bed; thick, glairy mucus, in a long string, flowing from the right side of her mouth. The face and right

side of body hemiplegic; her pulse 78, and temperature 98 2-5; she was also aphasic, with the exception of answering "no" or "yes," intelligently. to leading questions: could swallow, but not freely; her breathing was peculiar, and apparently somewhat oppressed; the face had a peculiar, bluish tinge, and the right jugular was very full and tense; bowels had been freed the day previously with castor oil: the lochia were correct, but the milk had considerably diminished: had frequent coughing fits, and ejected quite a quantity of glairy, transparent mucus, free of air; percussory sounds were much clearer than natural all over the chest; heart's action: first sound slightly below par, second regular, no murmur existing; subcrepitating rales heard all over the chest, anteriorly and posteriorly, occupying about the first two-thirds of inspiration, which had a prolonged character; expiration was short, sudden and quickly accomplished. I may mention here that partial emphysema of both lungs had existed for some years back, and I have had frequently to attend her for severe attacks of bronchitis, when she had that characteristic breathing and cough that peculiarizes asthma; the urine was normal in color and quantity, and did not contain albumen: tickling the sole of the foot on paralyzed side produced active reflex movements; no muscular rigidity was present.

From the above symptoms and signs I at once came to the conclusion that obstruction of the right side of the heart existed, (probably pulmonary artery); also, that an embolus, no doubt, occupied the middle and, possibly, anterior cerebral arteries of left side.

Treatment consisted in: Turpentine epithems to be applied every fourth hour to the chest: during the intervals, hot linseed poultices, to which a small quantity of mustard was added; the patient's body to be raised against pillows to relieve the dyspnœa, and to give a tablespoonful of the following mixture every fourth hour: ℞ Bromidi Potass, ʒij; Iodide Potass, gr xxxvi; Chloroform, ʒij; Ext. Polygal Senegæ Fluid, ʒij; Aquæ ad ℥vj.; diet, milk, chicken broth, &c.

This treatment was steadily persevered in all the day with partial relief. The face has lost the bluish tinge, and the venous congestion has also subsided.

23rd.—Pulse, 80: temperature, 98 2-5: was very restless during the night, constantly desiring to be raised forwards into a sitting posture: has expectorated quite a quantity of viscid mucus; lochia present, but paler: milk entirely gone: continue treatment.

Evening.—Symptoms appear much more grave: face congested to a bluish purple color; pulse, 104; orthopnœa, with highly exaggerated respiration; rapid suffocation imminent. Ordered a zinc sulphate emetic, which was followed by immediate relief and marked benefit, as the patient could lie flatter in bed, and the breathing was relieved. Continue treatment.

24th.—Pulse, 82; temperature, 99; passed a restless night, with considerable dyspnœa; diarrhœa also set in about 4 a.m., and the expectoration has nearly ceased: she appears now tranquil. Ordered a few powders of compound powder of chalk while necessary.

Evening.—Diarrhœa much better: no marked difference in the general symptoms.

25th.—Pulse, 88; temperature, 99 2-5; condition about the same as yesterday; diarrhœa better, but the cough more troublesome.

26th.—Temperature, 99; pulse, 94; full, but occasionally irregular; face puffy and red; very great restlessness, and a seeming inability to assume any posture of ease; respiratory movements hurried; heart's action strong, laboring and irregular; intelligence perfect, but aphasic state more decided; no power of answering no or yes, which to this existed throughout; subcrepitant rales are again heard all over the chest. Ordered a mixture of aconite and digitalis occasionally, to supplement present treatment.

Evening.—Pulse, 86; heart's action more regular, but the lungs seem gorged with mucus; face has again assumed the cyanotic color; veins of neck turgid; the zinc emetic again resorted to, with partial relief.

27th.—Pulse, 108—irregular; heart's impulse not so full, but the irregularity exists; the diarrhœa has again returned, and the clear saliva is flowing freely from the mouth; slight difficulty in swallowing. These latter symptoms, I consider, are due to the paralytic affection. She is evidently growing worse, and at mid-day this became most striking. At 5 p.m. she was seen in consultation with me by Professor G. W. Campbell, who was at once struck with the nature of the case. She was then perfectly conscious and her perceptive faculties active; yet all the symptoms had so increased in gravity that we could only regard the case as utterly hopeless. Increase in the strength of the doses of bromide and iodide of potassium was agreed upon, but of which she had only one or two doses, as towards midnight she became very restless; symptoms of suffocation setting rapidly in, and she died a quarter to seven in the morning.

AUTOPSY

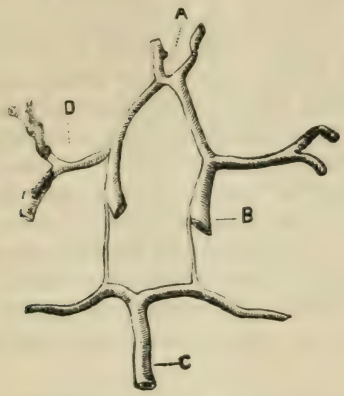
eight and a half hours after death: body much emaciated; rigor mortis marked.

Brain.—On removing the calvarium, which was not more than ordinarily thick, the dura mater was found firmly adherent to it through the enlarged pacchionian bodies: veins of dura mater full: general appearance of membrane normal. On exposing the brain there was nothing marked in its condition excepting that it was soft in consistence and pale. The arachnoid was not thickened in any part, and contained little, if any, fluid in its spaces. On making the usual section of the right hemisphere, the punctæ vasculosæ did not appear more than usually marked or engorged with blood. The right lateral ventricle contained about a drachm of clear serum. Nothing abnormal was noticed in connection with its contents, excepting the altered consistence which seemed to pervade the entire brain substance. Careful and minute sections of the corpus striatum and thalamus opticus were made without any positive result.

Left Hemisphere.—Punctæ vasculosæ normal: brain substance softer, in fact, than opposite side: gives way rather than cuts under the knife. On extending the section to a level with the corpus callosum a localized spot of softening, in area about an inch and a quarter square, was found extending from the lateral and anterior aspect of the corpus striatum forwards and outwards to near the circumference of the brain, involving the fissure of Sylvius and those convolutions known as the Island of Reil. The general aspect of the softened portion was white, but in places—say, in three or four spots, varying in size from a pea to a small marble—there was bloody infiltration and staining of the brain matter of a diffuse pinkish character. The ventricle contained about half a drachm of straw-colored serum, with minute flocculi of lymph floating therein. There were two small deposits of lymph, of the size of a split pea, on the floor of the ventricle: one over the semicircularis; the other in the extreme angle of the anterior cornu. They were firmly adherent in their places.

Base of Brain.—General appearance identical with that of

hemispheres. Arachnoid not thickened or œdematous in any place.



A.—Anterior Communicating. *C.*—Basilar.
B.—Right Carotid. *D.*—Left Middle Cerebral with Embolus.

Arteries—Left Middle Cerebral.—At the point of divison into its branches, three quarters of an inch from the carotid, the vessel appeared to bulge and felt decidedly resisting to the feel, thought to be atheromatous. Immediately beyond this, and plugging the two main branches, from the very bifurcation, were firm, dark clots, well defined and readily distinguishable from the vessels, both in their front and rear. Each clot was about half or three-quarters of an inch in length, and occupied the entire calibre of the vessels. All the branches beyond the obstruction were empty, collapsed and smaller, apparently, than normal.

There were also noticed two or three small but soft clots in the left anterior communicating, and left posterior communicating arteries. These occupied only about half the calibre of the vessels. Nothing requiring special notice was found elsewhere in the brain.

Heart.—Normal size. Considerable fatty accumulation, especially over left ventricle.

Left Ventricle.—Normal in thickness. Mitral valves healthy.

Right Ventricle.—Tricuspid valve entangled in an immense washed clot or antemortem polypus, which likewise extended up the pulmonary artery for a considerable distance.

Aorta.—Valves normal and patent. Three or four small spots of atheroma, scarcely raised from the surface of the vessel, and none larger than the head of a pin were noticed. Otherwise heart perfectly healthy.

Lungs.—Margin emphysematous. General condition healthy.

After the post-mortem I examined, under the microscope (250 diameters), a portion of the brain taken from the corpus striatum, and from the pinkish, softened substance in the Island of Reil. I found quite a quantity of oil globules and a large number of corpuscles of a somewhat roundish shape, varying in size from half a split pea down to the eighth of an inch: some having a small papilla at one end, others having a granulated appearance. On comparing drawings I made of these with what Gluge calls his "compound inflammation globules" many are identical.

The accompanying wood-cut is an exact representation of the embolus which occupied the left cerebral artery, and does ample justice to the very beautiful and carefully made wet preparation put up for me by Dr. Roddick, House Surgeon, Montreal General Hospital, who also kindly assisted me at the post mortem.

877 St. Catherine Street, Montreal, 13th June, 1872.

The Small-pox Epidemic in St. John, N. B., in 1871. By L. C. Allison, M.B. Read before the New Brunswick Medical Society, 3rd April, 1872.

(Continued from page 499 Vol. VIII *Canada Medical Journal.*)

TREATMENT OF HÆMORRHAGIC SMALL-POX.

As long as the head continues hot and aching I would apply cold to it, either by a bladder filled with ice, or by iced fomentations constantly repeated. An ice-bag may also be applied over the loins. Anti-emetics are useless if not hurtful. While the vomiting lasts I would give the patient small pieces of ice, or let him suck iced milk through a quill tube; and in all cases of small-pox I may say that it is worth some trouble to obtain a regular supply of milk, as well as to see that the patient takes his drink, whatever it may be, by small mouthfuls at a time. Dry heat may be applied to the epigastrium, with a small sand or salt bag, or a small flat stone, or a tin cup, heated and laid on a piece of flannel. I would not apply turpentine or mustard, far less a blister to the skin, for if you set up derivation from the cutaneous vessels, or let the cuticle get ruffled, you will make a new point for hæmorrhage to come from. On the second day, or as soon as the hæmorrhages have commenced, the pulse become soft and feeble, and vibices begun to appear, a mixture should be made of wine, brandy, or whiskey, with milk and eggs, if these last can be obtained, flavored with sugar and a little nutmeg or cinnamon, and the patient should be dosed with this *ad libitum*. Internal astringents will not control the hæmorrhage, but if any are given

I would use gallic or tannic acid, or the acetate of lead with or without opium, and eschew turpentine as there is invariably more or less hæmaturia, and generally *more*. Such is the only treatment that I can suggest for these formidable cases, and although it is merely palliative, I think that in some degree it mitigates the patient's sufferings, which is pretty nearly all that we can do. In the case to which I lately alluded, I am satisfied that the free use of alcholic stimulants along with milk and eggs, prolonged the patient's existence also. He was a blacksmith, a large finely made man, in the prime of life, but debilitated by having but recently recovered from an attack of typhoid fever. He had intestinal and renal hæmorrhage, with abundant petechiæ upon the legs and arms and some large claret-coloured vibices. I was agreeably surprised by his surviving through the first week, but on the ninth day my attempts at stimulation and nutrition were put a stop to by the supervention of paralysis of the œsophagus and soft palate, rendering him unable to swallow. Next day he died.

Dr. Aikman (*Glasgow Medical Journal*, November 1871.) regards this form of small-pox as due to prostrated innervation and recommends wet packing and the internal use of strychnia. As I have not seen his original article I do not know how far or with what results the plan has been tried. Had I known of it at the time I would certainly have tried it, though not with any high hopes of success, for I think that if the nervous centres are affected it can only be secondarily, and through a perverted crasis of the blood which neurotics cannot rectify. One thing I have forgotten in speaking of the hæmorrhages. They are chiefly from mucous membranes and beyond the reach of interference. But if they occur on the surface as they will from old scars, newly healed cuts, frost-bites, ulcers, &c., they must be checked by the local application of astringents such as the perchloride or pernitrate of iron, or if on the extremities, by a pad or a bandage. In one of my cases there was upon each leg a large ulcer, whose surface, on the second day, presented a villous appearance, and bulged above the skin like a stuffed crimson velvet pin-cushion. The same evening free hæmorrhage took place from these surfaces; I never saw capillary circulation so active. Although I attended within a few minutes, he had lost a large quantity of blood in the interval: cold sponging had no effect upon the hæmorrhage, but I arrested it by applying a compress and bandage to each limb. No further bleeding took place during the night, but next morning the patient was passing passing pure blood from both bladder and rectum, and in the afternoon he died.

IN THE TREATMENT OF PETECHIAL SMALL-POX

Quoted in *Lancet*, 10th February, 1872.

milk should be given while the vomiting lasts, and when it has ceased, the brandy and egg mixture should be added. If the eruption developes itself it will be a confluent of the most unfavourable, and the fever will be typhoid in character. Hence my practice was to give nutrients and stimulants freely, and I think that Dr. Holden's case was the same. I sometimes gave the sesqui-carbonate of ammonia in doses of gr. iv. to gr. vi., but when there was much tendency to hæmorrhage I preferred to use the alcholic stimulants, on the theory of Richardson that alkalies lessen the coagulability of the blood.

In treating the

CONFLUENT CASES

that were uncomplicated with hæmorrhage or petechiæ I followed the rules that are generally laid down by our authorities and which I need hardly detain you by recapitulating. During the preliminary fever all that is needed is to relax the bowels by a mild saline aperient, e. g., the sulphate of magnesia combined with dilute sulphuric acid, to give cooling drinks, of which ærated lemonade is the best—if it can be had, and feed with arrow-root or thin oatmeal gruel. When the secondary fever has set in, milk and beef tea should be given, but it must be kept in mind that besides the prostration due to the disease, we have to contend with the exhausting effects of a very extensive suppuration, which is not always confined to the superficial and visible regions of the body. We must always be on the look-out for deep-seated abscesses and for diffuse cellulitis in the limbs. Should this last event happen, an incision ought to be made as soon as fluctuation has become distinct: and before the wound heals, extensive sloughs will come away from the deep-seated fasciæ where the trouble originated. In one of my cases, which was not otherwise a very severe one, large portions of the intermuscular planes of the forearm were thrown off in this way. Cellulitis is met with in mild cases as well as in severe ones, especially where the patient is deficient in physical and mental stamina. Why it should happen after a moderate eruption I cannot tell, unless from a portion of the materies morbi having been diverted, in some way, to the deep fascia, instead of seeking its usual outlet by the cutis. Secondary complications were not numerous in my observation. I met with three or four cases of abscess in those who recovered, and two cases of bronchitis and another of pyemia among those which proved fatal. The only mischief to the eye which I saw was in a

confluent case that proved fatal on the twelfth day, and in which both eyeballs became abscesses and discharged their contents on the day before death. I should also mention the natural complication of pregnancy. I found pregnant women in infected families ten or twelve times, and was twice unfortunate enough to find them the first attacked. One of these mothers had been previously vaccinated, and she got off with varioloid, but her child was born jaundiced, and died of confluent small-pox, which showed itself on the 7th day after birth. An attempt to vaccinate it failed. The other mother had confluent small-pox, of which she died. Vaccination succeeded in producing vesicles upon the child, and, I think, mitigated the small-pox which followed, but it still proved severe enough to exhaust the diminutive patient after a struggle of nineteen days' duration. I had time to vaccinate the other pregnant women, and but one of them took the disease. She had it in a mild, distinct form and recovered speedily, but her child was born dead two or three weeks afterwards, with twelve large flattened papules, something like those of urticaria, scattered over its face. The abdomen was tumid, divested of cuticle, and of a reddish-brown color. I have no doubt that this child received the disease from its mother in utero, and died of it while she was recovering, some time before its birth.

I need hardly detain you with any remarks upon the milder forms of small-pox and their treatment.

In speaking of points of treatment that apply to all cases alike, I will be as brief as possible. First, as regards specific treatment there are none deserving of any confidence. The plan of inducing artificial pustulation, at an early stage, by ointments of tartar emetic and croton oil, I never tried, and I do not think that it sounds plausible even in theory. After what has been already stated I need not point out the mischief that would be likely to attend upon it in a case of hæmorrhagic small-pox, where every superficial breach of the tissues tends to become the seat of obstinate capillary hæmorrhage. In cases tending to confluence it would seriously add to the patient's discomfort, which is sure to be quite serious enough without any addition from the treatment, while in the milder cases the plan will be quite officious and unnecessary. In short, I have great faith in the old maxim that the less eruption that appears the better. If suppuration could draw the miasm away before it had time to mature itself in the blood, the patient with ulcers that I have mentioned, and another who had gonorrhœa, ought to have had at least some form of small-pox less severe than the hæmorrhagic. The plan seems founded upon a mistake. The materies morbi does, indeed,

determine in greater quantity to parts where there is increased vascularity, such as recent scratches, &c., but only after it has been fully matured, or, as the older physicians used to say, "concocted" in the blood, and has begun to show itself in other parts of the skin as well. These scratches have a *preference* but not a *priority* of eruption.

Neither did I experiment with the sarracenia, which some have extolled so highly as a specific, for I believe that during the last ten or twelve years the merits of this ill-looking and ill-tasting decoction have been pretty effectually exploded by an extensive series of trials. Apropos of this subject I may add that whenever you find the adjectives "Indian" or "Great Indian" prefixed to the name of a remedy, and a remarkably wonderful list of cures attached to it, you may at once take it upon yourself to affirm, decidedly, that the thing is not so, especially if it should happen to be a remedy for a disease from which Indians notoriously suffer more than any other race of mankind.

In short, we have, as yet, no specific for small-pox. But there are a number of drugs which have been recommended from time to time as useful adjuvants in the treatment. I shall mention only three of them, which were used to some extent by Dr. Holden and myself, and these are sesqui-carbonate of ammonia, carbolic acid, and the hyposulphite of soda. We found that

Carbonate of Ammonia exerted no influence in modifying the eruption or shortening any of the stages of the disease. In doses of from four to eight grains it is a good and useful stimulant in cases where there is no marked tendency to haemorrhage. But when this tendency exists I would withhold it for the reason already given. Until lately, the use of

Hyposulphite of Soda was almost confined to cases of Sarcina Ventriculi, in which it proves useful as is generally supposed through destroying the microscopic germs of the disease, by the sulphurous acid which it disengages. Two or three years ago Professor Polli, of Milan, proposed to administer it in infectious diseases, with the idea of arresting fermentative changes in the blood in the same manner. In some of the miasmatic fevers good results are stated to have been obtained from the practice, but I cannot confirm them with regard to small-pox. I administered the hyposulphite in doses of gr. x to ʒss repeated every four hours, in several instances, but could never satisfy myself that it had any effect, either in modifying the eruption or in sensibly ameliorating the symptoms. I think that it is an open question whether this drug really does evolve free sulphurous acid after

absorption into the blood in the same manner as it evolves it in the stomach.

Carbolic Acid has also been highly recommended as an internal remedy in zymotic diseases, I know not upon what theory, but probably upon the similar one of arresting germ multiplication and so hindering fermentation in the blood. I administered it in a number of cases, from an early period in the disease, sometimes alone and sometimes combined with Aqua Mindereri, in the form of carbolate of ammonia. I never observed that it checked or aborted the eruption, but I have so often seen the concomitant symptoms, especially the headache, improve during its administration, that I am rather inclined to think favorably of it as a palliative. I would not speak dogmatically upon this point, as in estimating the effects of remedies upon symptoms there are many sources of error capable of misleading much more careful and elaborate observations than any which I had an opportunity of making. Nor should it be forgotten that in making such enquiries we must attach a much greater value than usual to negative results, as compared with positive or what appear to be positive ones. In quite a number of cases the symptoms referred to resisted the effects of carbolic acid as well as those of other remedies. Yet, in some forty or fifty instances where I administered it seemed to relieve them more or less, in at least three out of four. In one case where the eruption was not copious, but the headache very severe and persistent, I increased the dose to the very large one of gr. x, and the headache at once ceased. In fine, carbolic acid will not shorten the stages or lessen the mortality of the disease, but as a palliator of symptoms I certainly think that it deserves a more extended trial. In the

LOCAL TREATMENT OF THE ERUPTION

I used carron oil to relieve the itching, and found it answer very well. It is not a very pretty or savory preparation, but in this disease such points are of less consequence than usual. In young children, when the eruption is copious, the hands should be muffled with cotton wool or the softest rags that you can get, and in spite of what you can do they will often succeed in tearing the vesicles extensively, for the cuticle is very thin and tender. When the cutis has been laid bare, the raw surface should be oiled with carron or olive oil and dressed with cotton wool. This accident is very liable to happen in those severe cases where large wrinkled bullæ appear, loosely filled with bloody or turbid serum. These should be evacuated and the wrinkled cuticle smoothed down and oiled. I did not find time to make any

observations upon the value of unguents in preventing pitting, but am to believe it trifling, if anything. The pitting, I think, depends mainly, if not entirely, upon the nature and amount of the eruption, and is not controllable by local remedies. In discrete eruptions it does not take place to any extent, but I never saw a confluent case that recovered without showing more or less of it. It does not occur until after the remains of the original pustule have disappeared. Sydenham, in noticing this fact, attributes it to a corrosive humor contained in the small furfuraceous scales that succeed the crust after it has fallen off. Light seems to have but little effect upon it, for I just now remember three of my patients of the same sex and nearly the same age, two of whom lay in darkened rooms, and the third in one that was well lighted. These cases were closely alike in symptoms and progress, and the degree of pitting was about the same in all three.

While speaking of the local treatment of the eruption I may allude to the sore throat which is always a distressing symptom in confluent cases. A variety of drinks have been recommended, the most elegant of which is an infusion made by pouring hot water upon black currant jelly—(Marson). If this cannot be had, molasses and water in the proportion of one part of the former to four or five of the latter make a very good substitute.

I think that I have now touched upon all the points of treatment upon which I have any special remarks to offer. I have not deemed it necessary to occupy your time by repeating all the practical details that are universally agreed upon, but have contented myself with noticing some points upon which there are differences of opinion, and upon such points stating my own and the reasons which I have for holding it. To go into full details of the complications that may arise, and the treatment which they require, would have led me beyond my limits, and was, moreover, unnecessary as all these have been thoroughly set forth by such excellent authors as Gregory and Marson, whose descriptions and directions leave nothing for any one to add to them. They are by far the best modern authorities that I have met with. The objective phenomena of the disease have been well described by Trousseau and almost as well by Sydenham, whose observations—made two hundred years ago and under disadvantages of which we can hardly conceive the magnitude—are wonderfully truthful and accurate, and form, as everybody knows, the foundation upon which the whole modern system of treating the eruptive fevers has been constructed. The epidemic of 1870-72 will add largely to the information supplied by these authors and by others, as it has brought under common observa-

tion, forms of the disease which hitherto have been but rarely met with.

I have still a word or two to add upon

DISINFECTANTS.

When the patient has got well, the last part of our duty is always to disinfect the premises. Even while the disease is in progress it is well to surround it with agents that evolve an acrid gas, which destroys the organic effluvia, and in doing so, probably decomposes part of the miasm by means of which the infection is propagated. For this purpose various substances have been used, of which I know none that is handier, cheaper, or more effective than chloride of lime, which, when moistened with sulphuric acid, gives off its chlorine freely. Sulphurous acid gas, generated by the combustion of sulphur, has been used occasionally. Its fumes ought certainly to effect a thorough destruction of the organic effluvia, but even when largely diluted with atmospheric air they are so intolerably acrid in respiration that they are hardly to be employed, unless it be possible to get all the people off the premises. The crusts that fall from the patient's skin, and the dressings that have been applied to it, should all be carefully collected and burnt. Such of the clothes and linen as are washable should be washed with Condy's fluid (a saturated solution of permanganate of potash) in the proportion of a tablespoonful to the gallon of water, and if they are boiled it will be all the better. Heavier clothes and mattresses should be fumigated for at least twenty-four hours with chlorine or some other disinfecting gas. But bedding that has got very dirty, old straw ticks and clothes of little value, had better be burned at once.

I have now, gentlemen, laid before you a hasty sketch of the epidemic of 1871, in which I have tried, as far as possible, to collect the important facts apart from repetition and minute details. I have laboured to be as brief as possible. I hope that I have not been obscure. The disease of which I have been speaking is a strangely interesting one. It has, indeed, many repulsive aspects both for the physician and his patient. There is no ailment which puts the patient so much in need of assistance from others, and at the same time throws so many difficulties in the way of his obtaining it; which in so large a measure combines protracted suffering and peril, with the risk of future deformity and disablement, which renders him so hateful to his fellow beings at a time when he so much needs their kindness and sympathy. There is none which demands from the physician more skill, readiness, and patient, unselfish labor, at the same time that it involves

him in so many quarrels, exposes his reputation to such serious risks, and earns him so little in the way either of pecuniary recompense or public gratitude. It brings us into contact upon the one hand with filth, stench, and physical loathsomeness; on the other with fright, selfishness, and many other despicable traits of human character. Yet with all this, there is no disease which offers us so interesting an exhibition of the abnormal but regulated workings of nature in the human body. There is none from which a conscientious physician can derive, in greater measure, the satisfaction that rewards useful labor bestowed from no unworthy motive. And there is none which tends more to call out and exercise those qualities of kindness and philanthropy which every physician should endeavour constantly to display towards his patients as far as poor human nature will let him.

TABLES.

(*A.*)—STATISTICS OF ORDINARY EPIDEMICS.

Deaths from Distinct Natural Small-pox	1 in 10
" Confluent " "	1 in 3
" Small-pox after Vaccination	1 in 33

Aitken, "Practice of Physic," vol. i., p. 256.

(*B.*)—STATISTICS TAKEN AT ST. JOHN, IN 1871.

(1.)—NATURE OF THE CASES.

	Attacked.	Died.	Mortality, per cent.
Hæmorrhagic Small-pox	11	11	All
Petechial "	14	14	All
Confluent and Copious Small-pox	95	38	40
Discrete Small-pox	54	8	14.8
Varioloids	31	..	Nil
	205	71	

(2.)—EFFECT OF VACCINATION.

	Attacked.	Died.	Per Cent.
Non-Vaccinated	138	69	50—1 in 2
Vaccinated	67	2	3—1 in 34

ARREST OF THE EPIDEMIC BY VACCINATION.

	Attacked.	Died.
Cases in February	85	28
" March	74	25
" April	19	9
" May	18	6
" June	5	3
" July	4	..
	205	71

The District Vaccinations were done in March.

(3.)—EFFECT OF AGE ON THE MORTALITY.

	Attacked.	Died.	Per Cent.
Under 1 year old	9	6	66
" 5 years old	35	19	54.3
From 5 to 20 years old	103	29	28.1
" 20 to 40 "	55	19	34.5
Above 40 years old	12	4	33.3
	205	71	

(4.)—DURATION OF THE FATAL CASES.

No.	Days' Duration.	Nature.	No.	Days' Duration.	Nature.	No.	Days' Duration.	Nature.
1	3	Hæmorrhagic.	80	11	.....	154	7	.....
2	3	"	81	11	.....	155	9	.....
7	7	.....	83	7	Petechial.	156	9	.....
8	7	.....	87	6	"	159	3	Hæmorrhagic.
9	8	.....	91	4	"	160	6	.....
11	12	.....	92	10	.....	162	18	.....
20	15	.....	95	5	.....	164	10	.....
21	6	Petechial.	97	15	Discrete.†	166	5	.....
23	5	.....	104	5	.....	168	6	.....
27	9	.....	106	6	.....	170	8	.....
28	9	.....	107	9	Petechial.	175	8	.....
43	2	Petechial.	111	5	.....	176	3	Hæmorrhagic.
45	6	.....	113	4*	.....	177	7	.....
46	6	.....	114	19	Copious. ‡	178	1	Hæmorrhagic.
47	13	Petechial.	123	3	Hæmorrhagic.	181	5	.....
49	6	"	126	9	.....	182	8	Petechial.
52	14	.....	132	11	Petechial.	184	5	"
57	10	.....	133	5	.....	185	6	"
60	2	Hæmorrhagic.	135	2	Hæmorrhagic.	186	2	Hæmorrhagic.
62	10	Petechial.	144	5	.....	191	1	"
68	2	Hæmorrhagic.	147	9	Hæmorrhagic.	199	11	.....
74	11	.....	150	7	.....	202	16	.....
78	5	.....	152	5	.....	203	5	.....
79	6	Petechial.						

* Hours. † Pyæmia. ‡ Infant.

The average duration of these fatal cases was seven days and a fraction.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

Case of Depressed Fracture of the Frontal Bone, with Fracture of Fourth and Fifth Cervical Vertebræ, under the care of G. E. FENWICK, M.D. Reported by Mr. W. A. MOLSON.

Oscar Stromme, aged 27, Norwegian sailor, was admitted to Montreal General Hospital, under care of Dr. Fenwick, 11th June, 1872, at 7:30 a.m. He had been assisting in the storing of ice on board the steamship "France," and, while standing at the edge of the hatchway, the hooks holding the block of ice gave way, and he was precipitated to the very bottom of the ship, striking, with his feet, the blade of a spare fan. The violence of the fall threw him first forwards upon the edge of the blade, causing fracture of the skull, then backwards, breaking his neck. He was brought to the hospital almost immediately, when his condition was found to be as follows:

Pulse 72, regular but weak; temperature in axilla 97 3-5; lividity of entire surface; was quite rational, but knew nothing of the particulars of the accident. On examination, a wound, three inches in length and three-fourths of an inch in breadth, was found to extend across the forehead, at the roots of the hair, communicating with a depression in the skull, three inches in length, in the line of the external wound, nearly an inch in breadth, and from one-half to three-fourths of an inch in depth, the deepest portion being above. In moving him, he complained bitterly of pain in the back of the neck, and, on examination, it was thought that a depression of one or more cervical vertebræ existed. Sensation was entirely absent in the lower extremities and for some distance up the trunk. There was loss of power in the upper extremities; but, on being disturbed, he complained of pain in the arms, especially the right. The breathing was most peculiar, being entirely diaphragmatic, the chest-walls not moving in any part; reflex sensibility entirely absent; paralysis of the bladder and rectum. Before admission to hospital several ounces of brandy had been administered to him, which produced considerable irritability of stomach, causing violent emesis.

A bladder of ice was applied to the head, hot applications to the feet, with beef-tea and pieces of ice internally.

9 p.m., same day.—At times he has been slightly delirious, but when spoken to was immediately aroused and answered intelligibly. The paralytic symptoms have not altered, with this exception, that the pain on moving the upper extremities is increased. He has taken nourishment freely without vomiting. Pulse 80; pupils slightly dilated; passed a small quantity of water in the forenoon; bowels quiet; the breathing continues quick and purely diaphragmatic, showing that the lesion to the cord exists below the portion giving off the phrenic nerve.

June 12th, 9 a.m.—Patient pretty quiet during the night; mental condition somewhat the same as yesterday; pulse 100; temperature in axilla 101; no vomiting; sensibility absent as high as the nipples, above them intense hyperæsthesia, especially of the right arm; face slightly cyanotic; has not urinated for nearly twenty-four hours.

8:30 p.m.—Pulse 92; temperature in axilla 101 4-5; temperature between the toes 102 4-5; temperature of cheeks 108½; has been delirious all day, and for the past three or four hours breathing has been more labored; can be aroused only with great difficulty. It was found necessary to catheterize him, when about half a pint of dark-coloured ammoniacal urine was drawn off. He continued to grow worse from this time, and died early on the morning of June 13th.

Autopsy Sixteen Hours after Death.—Rigor mortis well marked. Head; besides some of the characters mentioned above in the history of this case, there was noticed, on removing the calvarium, a depression of the inner table, corresponding to the internal fracture. This depressed portion of bone extended for about two inches in breadth. Through the fracture, the brain could be reached by an aperture in its upper part; considerable effusion of blood, with formation of clot between the bone and dura mater. It may be mentioned that the external wound was situated higher on the forehead than the fracture, showing that the violence must have been from above. Dura Mater wounded over the left hemisphere, opposite the opening in the inner table, for about one inch in length. On removing the membranes a thin clot of blood was found occupying the entire space between the dura mater and the arachmoid on that side; veins engorged with blood; general congestion and staining of surface of entire hemisphere; occasional flocculi of lymph beneath the arachnoid; corresponding to the opening in the dura mater, was a wound in the brain substance of the same dimensions, with considerable hæmorrhagic effusion

in the neighborhood; brain matter softened and readily washed away under a stream of water. On making section of the right hemisphere, the brain was found softened for about half an inch below the bottom of the wound. *Punctæ Vasculosæ* normal; ventricle healthy; other portions of the brain normal, with the exception of slight bloody extravasation beneath the dura mater, over portions of the left hemisphere; weight of brain fifty (50) ounces. Back.—Upon cutting down on the back of the neck, an extravasation of blood into the tissues was noticed, extending for a distance of five inches along the left vertebral groove, with fracture of the spinous processes of the fourth and fifth cervical vertebræ. The spinal dura mater being exposed, it was found covered with a thin layer of extravasated blood for about three inches of its extent, or over that portion corresponding to the above-named vertebræ. Examined, *in situ*, the cord was found deeply indented in two places, but more opposite the fifth than the fourth cervical vertebræ; and, on removing it, fracture of the entire body of the fifth was found. In that situation, therefore, the cord was impressed from two aspects, thus accounting for its almost entire division.

Case of Injury to Spine—Paraplegia—Head Symptoms, Death on sixth day. Under the care of Dr. JOHN REDDY. Reported by Mr. F. J. Shepherd.

J. M, aged 59, was brought to the Montreal General Hospital, on the evening of the 10th of May, suffering from paraplegia, the result of injury to the back.

History. When in the act of stepping on a scaffolding it gave way, precipitating him a distance of some twenty-five feet to the pathway below. When taken up, he was found insensible and immediately brought to hospital.

On admission he had sufficiently recovered to be able to give a lucid account of the accident, pulse shabby, lips pale and general lividity. On examination there was discovered a depression opposite the eleventh dorsal vertebra, with intense pain in that region. To use his own words "he was a man who took a little but was never out of the way with liquor." He says he was perfectly sober when the accident occurred. He had also a slight scalp wound.

May 11th. Seems quite sensible this morning, very talkative, has a small, rapid, shabby pulse, coated tongue, urine highly alkaline, found it necessary to catheterize him, drinks freely and vomits constantly, complains of great pain about the middle of the back and sides, morning temperature in axilla 100 2-5, pulse 118, evening

temperature in axilla 100, pulse 100, and still shabby and small, abdomen distended and tympanitic.

Treatment.—Water-bed, ice to spine, cold to head, stimulants, four ounces of brandy, beef-tea and milk *ad libitum*. Ordered Potass. Bromid grs x Potass. Jod. grs. v every four hours.

May 12th 9 *a. m.* Pulse somewhat stronger and less rapid, tongue dry, brown and cracked, skin moist and cool, urine dribbles constantly, vomiting and thirst have ceased, still complains of great pain in the side. Temperature in axilla 98 1-5, pulse 96.

8.30 *p. m.* Pulse not so strong, skin hot and dry, temperature 96 2-5, pulse 80.

May, 13th 9 *a. m.* Bowels open this morning, quite delirious, had strange illusions such as fancying that some one was trying to remove the bed-clothes, eyes very restless, talks and laughs constantly, skin moist and cool, respiration performed imperfectly, has a troublesome, short cough, indicative of weakness of the respiratory muscles, heart's action feeble, temperature 99, respirations 25, pulse 95.

8 *p. m.* Pulse less frequent and weak, skin hot and dry, delirium more violent, general tremor, similar to that in delirium tremens, extremities cold, temperature 101 3-5, respirations 26, pulse 75, was ordered two ounces more of brandy. It becomes a question whether this delirium is not that produced by alcohol.

May 14th 9 *a. m.* Pulse somewhat stronger, delirium still continues, grasps at imaginary objects, tremor continues, great restlessness, can answer a direct question intelligibly and recognizes persons and objects, conjunctiva suffused, paralysis of bladder and rectum continues, last night had a turpentine epithem applied to chest, and chloral, hydr grs x administered every two hours.

May 15th 9 *a. m.* Very weak, condition semi-comatose, can be aroused with difficulty, no delirium, eyes dull, heart weak, respirations very irregular, temperature 101 4-5, pulse 88.

8.30 *p. m.* Pulse hardly perceptible, respirations very weak, quite conscious, says that he does not expect to last long.

May 16th. Died at 2 a. m.

Autopsy.—*Brain.* Arteries atheromatous, especially right carotid at its division—dura mater firmly adherent to calvarium, Pacchionian bodies large and very adherent, Brain substance firm in consistence, *punctæ vasculosæ* normal, slight effusion of lerous fluid into ventricles.

Spinal column.—Great extravasation over the spine from the 5th to the 12th dorsal vestebra, comminuted fracture of the entire 7th dorsal vertebra, the cord in that region being pressed upon from both aspects, a spicula penetrating its substance. The entire cali-

bre of the cord was softened and disintegrated in this spot. Fracture also of spinous process and arches of the eleventh dorsal vertebra, cord quite healthy beneath.

Reviews and Notices of Books.

History of Medicine, from the Earliest Ages to the commencement of the nineteenth century. By Robley Dunglison M. D: LL.D; Late Professor of the Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia, &c., &c. Arranged and edited by Richard J. Dunglison M. D.. Philadelphia; Lindsay & Blakiston.

This work, as we are informed by the editor in his preface, is an embodiment of the course of lectures delivered by the Elder Dunglison, many years since at the University of Virginia. At this time, it appears, the "history of the progress and theories of Medicine" formed one of the subjects which he regularly taught to his students—and it is with truth remarked that "it was a wise provision that thus incorporated with the other features of a didactic course a knowledge of Medical Literature which, however valuable, is generally considered as an accomplishment rather than as an indispensable necessity." The present work is stated to have been issued to supply a want very generally felt for some congenial convenient work for lack of which this study has been almost entirely neglected. The first chapters are devoted to a description of the very earliest known proceedings which can be supposed to bear the semblance of medical procedure, and at some length it treats of the various mythological and superstitious rites practised amongst the ancients, under the pretence of curing the sick and tells how in old times the word "*Abracadabra*" hung around the neck as an amulet would be used to chase away the ague, an hexameter from the Iliad to allay the agony of gout and a verse of the lamentations to cure the Rheumatism. The glimmerings of attempts to arrive at rules for the treatment of disease are then traced successively as witnessed amongst the Jews, the ancient Romans, the Hindoos, the Chinese, Scythians, Celts and the ancient Greeks. This occupies the first ten chapters after which we arrive at the time of Hippocrates B. C. 470, who was the first to introduce some entirely new teaching into the science of medicine then in its very infancy. He taught what was quite opposed to all then preconceived ideas that "nature was the first

physician," and impressed the necessity of observation of her workings. He also was perhaps the very first to endeavor by hygienic or rather disinfectant means to check the spread of an epidemic which was rapidly extending. He caused fires to be burnt as well as aromatics over the whole city in order to purify the atmosphere, which measures are related to have been entirely successful. His immediate successors and the so-called dogmatic school are next reviewed, when we come to the great philosopher Aristotle who made many discoveries in Natural History and some in Anatomy and was the first to locate the origin of all the vessels in the heart. The next marked advance was the separation by Praxagoras, who lived shortly after Aristotle, of the arteries from the veins, although he was in gross error as regards their real purpose in the economy, for he supposed that the arteries were always filled with air. We are then introduced to the Alexandrian School foremost amongst whom was Herophilus, whose name is still retained in modern anatomy in the torcular Herophili, and whose nomenclature of the fissure on the floor of the fourth ventrile is still extant as the Calamus Scriptorius. Another name closely associated with his is that of Erasistratus who attempted some physiological theories such as: that digestion was performed by attrition, &c., and who described the tricuspid valve. Next come the Empirics who despised anatomy and professed to act solely upon the result of experience. "The Empirical School terminates the most ancient period of the history of medicine, and that which gives a type to the healing art of the subsequent ages." We have then a description of the state of medicine during the early Christian eras, including the works of two great men, Celsus and Galen, a delineation of the different sects into which physicians were at this time divided and a description of the various abuses to which they subjected their art. At the time of the appearance of Galen, it is said that "the schools of medicine were a prey to the most pernicious dissensions, the partizans of the schools of Erasistratus, of Hippocrates, Herophilus and of the Empirical, methodical, eclectic and pneumatic sects, divided in their opinions, agreed in one point, that of converting medicine into a tissue of frivolous subtleties and useless discussions. In the midst of this disorder, Galen appeared, and led back to the safer road of patient thinking and accurate observation which so much distinguished the Hippocratic school." It is pointed out, how at and after this period the progress of medicine was still retarded by the admixture of a strong religious and partly superstitious feeling in all medical education and procedure. Following further, we find explained how the annihilation of medical education was begun by the super-

stitious and intolerant orthodoxy of the Christian Emperors of the East and completed by the dismemberment of the Roman Empire and the destructive invasion of the barbarians of the North. We then learn how the Arabians retained what little was still known of the medical art which they had obtained from the Nestorians, who had it in safe keeping, and from the Athenian philosophers expelled from their country by Justinian. We then pass by the 7th century, which contained Paulus Ægineta, called the first man-midwife, and during which we find the first attempts at Chemistry and Pharmacy amongst the Arabians and the very first description of the small-pox given by one Aaron Ahran. We are thus brought, after the 6th century, to the period of the Monks of the West, who almost exclusively exercised medicine as a work of piety and charity, and as a duty attached to their divine calling. They however neglected the study of science, having recourse, to a great extent, to prayers, relics of martyrs, holy water and other ceremonials of the Romish Church, "In the 14th century medical instruction experienced in European countries, a revolution of the highest importance and one to which Medical Science is indebted for its subsequent progress." By this reference is made to the public practising of dissection of the human frame and consequent insight into anatomy and physiology: but notwithstanding this important step, the progress of medicine was retarded by the extensive study of astrology, and the implicit faith placed in its teaching by the ignorant public. In the 16th century all the different branches of medicine were studied and many books written which are still extant. From this time dates the gradual awakening of the world to the importance of the science of medicine and many familiar names begin to appear, names which in some cases have not even now lost all the authority which they once possessed. Arriving at the 17th century, we have the great discovery of the real nature of the circulation of the blood, the days of the Humoral theory and amongst many well-known names, those of Willis, Malpighi, Sydenham, Wharton and Bœrhaave. After this period the medical sciences began fairly to assume the important place in literature and the extensive practical influence which they occupy and exert at the present day. It is indeed hard to properly estimate how closely the welfare of this entire universe is interwoven with subjects intimately connected with the art of preserving and maintaining health. Every day we find fresh signs of the interest taken by the public in purely medical concerns so fully are they being convinced that it is only by the diffusion of general knowledge upon these subjects that an enlightened public opinion will be enabled to combat the causes of disease and death. We refer

more especially to what is now known as the Science of Hygiene, and it is strange to think how long it has taken to arouse anything like a proper feeling in the civilized world as regards these all important matters—and it is extremely interesting to note the gradual progress of medical enlightenment, as depicted in the volume before us, leading up by insensible degrees from the first dawning discoveries of the nature of disease, to the period of the present day, when we have succeeded in discovering the causes, or rather modes of origin, of many contagious and other affections, and now endeavour to *prevent*, if possible, the occurrence of disease rather than have to cure it when it has occurred.

We have perused this volume with much pleasure and recommend it to all as a very useful and really instructive book, and one which we hope may have a large circulation, for we are sure that its study by all thinking men—both students and practitioners of medicine—cannot but be productive of great good and much pleasure of an instructive nature.

It is well printed on tinted paper and is got up in a manner very creditable to the publishers.

The present edition is issued only to subscribers, but it is a work, we think, of such merit, and so generally useful that we trust its pages may in future be thrown open to the general medical public.

Earth as a Topical Application in Surgery; being a full exposition of its use in all cases requiring topical applications admitted in the Men's and Women's Surgical Wards of the Pennsylvania Hospital, during a period of six months in 1869. By Adinell Hewson, M.D., one of the Attending Surgeons to the Pennsylvania Hospital. Philadelphia: Lindsay & Blakiston, 1872.

The greater part of this work is taken up with the histories, in detail, of a number of surgical cases, ninety-three in all, which were treated by Dr. Hewson in the Pennsylvania General Hospital three years ago. It is satisfactory to find that *all* the cases have been reported without exception or selection, and consequently, as the author justly observes, since there were numerous and constant witnesses of the cases, and the details of *all* of them being given, he has avoided the suspicion of suppressing anything which could have then led him to other conclusions. The idea of using dry earth as a dressing for foul wounds in surgical practice, is one which has naturally arisen from the consideration of the undeniably useful purpose which the same substance has been found to subserve in the deodorizing of fœcal and other disagreeable matters,

as established by the extensive use of Moule's patent earth closets. It is from this source that the author acknowledges to have first drawn his idea of this novel surgical dressing. He quotes, however, a letter from an eccentric individual named Minshall Painter, of Delaware County, written in 1857, which, he says, contains the germs of the very idea he is attempting to develop; but it seems to us Minshall Painter is a long distance ahead of his successor in his admiration of the *mud* system, for he actually contends that a free supply of honest dirt kept pretty constantly applied to the outer covering of the human frame is rather conducive to health and longevity than otherwise, which, we must say, is somewhat opposed to the old adage still, we are happy to think, universally regarded, that "Cleanliness is next to Godliness." "For instance," he says, "children that crawl on earth and play in the dust, and occasionally fill their mouths with it, provided their nurses occasionally clean them, are generally healthy." And again, "we have heard of savages who eat largely of some varieties of clay, and some families, not over-tidy, enjoy good health, while those more scrupulous do not enjoy the best."

The earth or clay used in all the experiments was the same, viz., "from deep diggings, well dried (but not roasted) and sifted through a fine flour-sieve; the yellow subsoil, rich in ferruginous clay, and entirely free of all sand, grit, or foreign matter." It is applied, according to circumstances, either dry or moistened with water in the form of paste. Besides this, he frequently makes use of "gauze and collodion" supports to the wounds, in place of ordinary plaster.

"The gauze is a strong silken tissue, with meshes large enough to allow the collodion to penetrate and dry on the skin beneath. I have been in the habit of using, as a less expensive but equally efficient article, the tarletan much employed by old ladies for caps in our plain city. Its mode of application is this: Strips are to be cut from such tissues along its woof or lengthwise, and of convenient width, as we cut the ordinary or adhesive plaster. The end of one of these strips is to be placed at some distance on one side from the edges of the wound, and there secured by painting collodion on its meshes. When the collodion becomes dry we have the strip so firmly fixed that it will bear any degree of traction necessary, and far more than the adhesive properties of any form of plaster will permit. By traction on its free end it is then to be drawn across the wound, and being satisfied that it gives all the support required, it is to be secured by the collodion at this free end, and at a point similarly remote from the edges of the wound." Over this is applied the earth.

The cases treated include, amongst them, the most formidable accidents and injuries which it is possible to meet with in the whole range of surgery; such, for instance, as severe compound fractures, extensive and sloughing cellulitis, large and deep burns and scalds, amputations, bad forms of chronic ulcer, abscesses and diseases of bones, &c.: and a considerable measure of success, on the whole, is claimed for this special treatment. Dr. Hewson is not, however, unwilling to admit his non-success in those cases which did not progress in a satisfactory manner. In some instances he refers his failures, however, to the great difficulties experienced in enforcing a fair and honest application of the dressing, and in ensuring the due rest of the patient in his bed, owing both to rebellion on the part of the nurses to whom it was troublesome, and to objections on the part of the patients who thought they were being experimented upon.

The principal result claimed to have been obtained by these earth-dressings is *deodorizing*. The power of dry earth in this respect is undisputed, and we think that the author has fully sustained the proof of its efficacy in this respect, after a most rigid trial, especially in some cases of extensive cellulitis, accompanied by very profuse discharge of fœtid pus. The beneficial effect here obtained, by the removal of all offensive odor, was, doubtless, very great; but, though agreeing to this, we cannot admit that we do not possess other chemical substances, such as carbolic acid and the permanganate of potash, which are found just as effectual in removing odor, and, at the same time, furnish more cleanly and less troublesome dressings than the earth.

Application of earth, such as has been described, is shown not to be accompanied by any feeling of pain or irritation; but, on the contrary, the dressing has, generally, been pronounced by the patients themselves as cool and agreeable. When pain is present it is claimed that the earth generally serves to allay this; but, we can hardly agree that that point has been satisfactorily demonstrated. Instances, such as those quoted, where, under its use pain was not felt where we might have expected it to be present, are, perhaps, just as often met with under the application of plain cold water.

This mode of dressing wounds is further believed to prevent, to some extent, the occurrence of inflammation, and to favor the healing process. To what extent it can really accomplish these desirable ends, we think, must remain to be decided by further and more extended series of experiments. A theory of the *modus operandi* is attempted to be constructed on purely chemi-

cal data; but, as it is wholly hypothetical and of no practical utility we decline to enter into the discussion of this point.

To conclude, this book is, from its very novelty, worthy of perusal, and may, perhaps, lead to something more; but we do not think that the system recommended is one at all likely to come into general use.

The Physician's Prescription Book, Containing Lists of the Terms, Phrases, Contractions, and Abbreviations used in Prescriptions, with Explanatory Notes; to which is added a Key, containing the Prescriptions in an Unabbreviated Form, with a Literal Translation. By JONATHAN PEREIRA, M.D., F.R.S. Fifteenth Edition. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Bros.

This little hand-book of the art of prescribing has made its appearance in a fifteenth edition, which fact shows that it must be used and appreciated by some class of the drug-handling fraternity. It goes fully into an explanation of all the Latin medical terms which have ever been in general use amongst the profession, explaining the different shades of meaning between different Latin words, and teaching how to express in Latin the same thing in different ways. It contains, also, a complete Latin syntax for the proper arrangement of sentences in prescriptions in good medical Latin, upon the model of Celsus, who is here truly styled "our greatest and almost only authority in everything relating to medical Latinity." We fear that the book is not one which is likely to be practically useful either to the medical student or the practitioner of the present day owing to its having reference entirely to the writing of prescriptions in the Latin tongue, which has been wholly given up, both by the late British and American Pharmacopœias. It is admitted in the introduction to the work that it is on many grounds preferable to write the directions for the compounder in the vernacular, and yet nearly the whole book is devoted to teaching (what it requires considerable study to master) how to elegantly express the same in Latin. The author confesses that the latter language is not now-a-days fully understood by many who prescribe medicines, and in a foot-note relates how he once, with great surprise, heard an eminent hospital surgeon confess his inability to write in Latin the directions to the patient. We know many eminent hospital surgeons in the same predicament, but we hardly think that at the present day that ignorance of the old-fashioned curt and sometimes pedantic Latin would in any way detract from their ability to understand disease and prescribe

for it in their own mother tongue. To the pharmaceutical student, however, this little manual may be useful, as serving as a guide and help to him in pursuing his studies amongst old authors, or in understanding the directions of those who still make use of the dead language in their prescriptions.

Dr. Rigby's Obstetric Memoranda: Fourth Edition, Revised and Enlarged. By ALFRED MEADOWS, M.D., Physician to the General Lying-in Hospital, and to the Hospital for Women; Author of a "Manual of Midwifery," &c. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Bros.

This small manual is one which most especially commends itself to the junior practitioner and to student-pupils who take charge of midwifery cases for their preceptors. It contains a succinct *resumé* of what it is absolutely necessary to know concerning the female pelvis and generative organs; concerning pregnancy and the accomplishment of natural labour; together with the duties of the medical attendant at every stage. It reminds, also, of the various complications and dangers which may arise during the pregnant condition or during the act of parturition; at the same time mentioning the modes of procedure found most useful in combating or subduing these. It concludes with a few words upon puerperal fever. The whole is well and conveniently arranged for reference, and is expressed in language at once concise and intelligible. It carries out fully the object expressed by its title, for it contains all those "things to be remembered" whilst practising the obstetric act.

PERISCOPIC DEPARTMENT.

Surgery.

AN ADDRESS ON ENGLISH RECOLLECTIONS OF A GERMAN SURGEON.

BEING A SPEECH DELIVERED AT ST. THOMAS' HOSPITAL, MAY 23, 1872.

By Dr. STROMEYER, of Hanover.

GENTLEMEN,—I suppose I may leave it to the kind care of my youngest English friend, Mr. William McCormac, to account for the liberty I take in addressing you. Let me ask your indulgence

for spoiling the Queen's English, which is not my native language. This is the first time that I speak to an English audience. As a surgeon, I dare say, I am not quite a foreigner, having got a sprinkling of English surgery even by inheritance. My father, who was a member of the Royal Medico-Chirurgical Society in London, and well known in his time, by having introduced vaccination in Germany, was a regular pupil of St. Thomas' Hospital, from 1792 to 1793, under Mr. Cline, at a time when Sir Astley Cooper was a demonstrator of anatomy there. He had a very high opinion of English surgery, and used to say that the best surgeons in the universe were to be found in London; that during a twelve-months' presence there he witnessed only a very few cases in which his opinion was different about the propriety of the operations which he daily saw performed. He was able to judge for himself, being already thirty years old when in London, and having been a pupil and assistant of Professor Richter in Gottingen. I followed my father's example, and have been a pupil myself at St. Thomas' Hospital in 1827 and 1828. Mr. Henry Green introduced me there, and made me acquainted with the splendid circle of surgeons then living in London—Benjamin Travers and John Tyrrell, of St. Thomas' Hospital; Bransby Cooper, Aston Key, and Mr. Morgan, of Guy's Hospital; William Lawrence and Henry Erle, of St. Bartholomew's Hospital; Sir Benjamin Brodie and Mr. Rose, of St. George's Hospital; Sir Charles Bell, of Middlesex Hospital; Mr. Guthrie, of Westminster Hospital; Mr. Wardrop, of Westminster Eye Infirmary. Sir Astley Cooper had already retired to the country. I have only seen him on an occasional visit to St. Thomas' Hospital, where he used to come from time to time when he was tired, as he said, of looking after the ewes. It was highly gratifying to see how his presence used to be hailed. The same scene took place when old John Abernethy appeared in St. Bartholemew's Hospital. The students flocked around him, and he generally gave them a speech, in parting, in the open court of the Hospital, ending by quoting Shakespeare. Being very partial myself to the great poet, I liked these quotations, which reminded me of Sydenham recommending to read "Don Quixote." For a surgeon, nothing is so injurious as dulness; he must always be in good spirits when his services are required. Sir Astley Cooper used to say that a surgeon ought not to read too much; but this, I suppose, meant dull authors, not Shakespeare or Cervantes, who are both of them very accurate observers of human nature, like Dickens, Sterne, and Fielding, whose "Tom Jones," I daresay, you may happen to know.

I could speak for hours if I were to say what influence the

surgeons in London whom I have named had on my mental development. First of all, I admire the truly noble character of the profession, the good feeling of its masters to each other, their candour, their humanity in the treatment of severe cases. I can only repeat what my father said fifty years ago—the operations which I saw were, all of them, necessary, well planned, and, in most cases, executed with great dexterity. Manual dexterity was considered as a quality which scarcely deserved to be mentioned; it was only spoken of where it shone by its absence in a bungling operator. Every operation was executed with the sole view to save the patient's life or to diminish his sufferings, not to show the dexterity of a *virtuoso*. Circular amputation was preferred to the more showy flap amputation. This I had not forgotten when I had some influence in recommending the circular amputation in times of war, where it is of greater importance still than in chronic cases of civil practice. In 1827 I examined the invalids in Greenwich Hospital, on whom amputation had been performed by the flap method, and found that the fleshy cushion had disappeared entirely. Besides this, I admired English surgery for the simplicity of its application. The great conformity of principles resulting from simplicity struck me as highly valuable, because it makes a deep impression on the mind of a younger member. This conformity gives English surgery a national character. It is not the same in other countries, where only your very particular friends admit that you are right in saying that two and two make four, or that a severe gunshot fracture requires amputation.

I was well satisfied with the great caution of English surgeons in adopting innovations. I saw no resections then, and there was no trace of lithotripsy yet. It is better to begin slowly, and then to go on steadily. This is otherwise in Germany and in France, where surgeons are fond of novelties. At present you may witness the effect of greater caution. Sir Henry Thompson has eclipsed the inventor of lithotripsy, Civiale himself, whose instruments, indeed, were not worth trying till Heurteloup had found the right ones for him. Sir William Fergusson, by his articular resections, has surpassed most Continental surgeons. Mr. Spencer Wells, in ovariotomy, all living surgeons.

From what I had observed in London, I came to the conclusion that the beneficial influence of surgery and the high standing of the profession depend chiefly—(1) on the good feeling of its members towards their patients and towards each other, not excluding those of a former time; (2) on simplicity; (3) on a total abnegation of selfishness in planning and executing surgical operations.

You may ask me, gentleman, why I could not have learned that just as well in Germany. There is no place there which can boast of such a number of great surgeons at the same time. Our greatest capitals have but a few surgeons of eminence in comparison. Whatever may be their merit, their example is not so striking as that of a whole body acting the same principles. In Paris the number of surgeons is greater than in our German universities of Berlin or Vienna, but not to be compared to London, which I consider is a central point of surgery for the whole globe. This, gentlemen, you may consider as the sincere opinion of a man who has watched the progress of surgery during half a century. I wish it may remain so for centuries.

After having been in London, I happened to be in Paris at a time when Lisfranc was thundering against Dupuytren, whom he used to call "le barbare de la Seine," as a sample of the good feeling amongst the profession there. It is one of the great advantages of travelling, and of seeing eminent men of other countries, that, by observing them in their activity, one may acquire a better notion of their character. Their writings excite greater interest, because we are inclined to give them greater credit. I always admired the simplicity of style in English authors in general, and of surgical writers in particular. Sterne ridicules the pompous style by mentioning the expression of his French barber about the solidity of a new wig, "You may immerse it into the ocean." An Englishman, says Sterne, would have preferred a pail of water. To avoid the barber's style, I took precious good care never to say ocean when I meant a pail of water.

After sketching these general impressions, permit me, gentlemen, to give a few particulars of the manner in which some of my English teachers have influenced me. Having so lately seen one of the greatest battle-fields of modern history—that of Sedan, where I met Mr. William MacCormac, who, from over-exertion, did not look so well as to-day—and the siege of Paris afterwards, let me speak of Mr. Guthrie first. I cannot say that I liked him personally quite so well as many of the others; but I admired his energy in maintaining the great principles acquired in the Peninsular War—the necessity of early primary operations, of tying a wounded artery, if possible, on the wounded spot itself. I have done all in my power to keep his doctrines, those of the admirable Hennen, and of old Baron Larrey, in fresh memory since 1848, when the time seemed to approach that Germany must go war for its own development. For a man of sense, there can be no doubt about the necessity of early primary operations; but in military practice there are difficulties in which it is the duty of

every medical man to maintain the sacred cause of humanity. The sentiment was appreciated even by a conqueror like Napoleon I., who said of Larrey that he was the most virtuous man he had ever known. It was one of Mr. Guthrie's best qualities that he always gave very positive reasons for what he did; so another person could easily find out whether his own views must be in accordance with Mr. Guthrie's opinions. There was no fickleness about him. I differed from him in one essential point—that of his preferring amputation for gunshot-fractured thigh to conservative treatment. Guthrie places too much stress upon the imperfections of conservative treatment, the result of which is often a very disabled limb, whose possession does not make the patient very comfortable. But these imperfections admit of improvement, while a high amputation gives no prospect of better chances: it will always remain a very dangerous operation. Our first object is to save a man's life, and the second to make him comfortable, but not in his grave. My results of conservative treatment in gunshot-fractured thigh, during the first three campaigns of 1849, 1850, and 1866, did not go beyond 50 per cent. healed. I saw the reasons of our failures, tried to avoid them, and went on with conservative treatment. In the two campaigns of Schleswig-Holstein (1849 and 1850) the patients had to be carried to considerable distances. After the battle of Langensalza, in 1866, I was unable to prevent many cases from being spoiled by an injudicious use of plaster bandages. It was in Floing, near Sedan, where we succeeded in saving 77 per cent., twenty-seven amongst thirty-five patients, who have been carried to no great distance, and were treated without putting much restraint on their shattered limbs.

From my own father I had learned the advantages of Percival Pott's position, which may be employed during the first period in most cases; in others or later the double inclined plane, or a straight wire basket, will suffice. According to my opinion, the great principles to be followed in compound fractures in general are—(1) dressing the wounds without lifting the limb; (2) avoiding constriction; and (3) not irritating the muscles in straining them by mechanical contrivances. A gunshot-fractured thigh permits a weight to be suspended to it, keeping the limb a little at rest, like the hand of an assistant, but not an extension by weight or other contrivances, that gives the limb its proper length, except in very few cases, as mentioned by Mr. MacCormac in his "Notes and Recollections," which healed without difficulties and without any perceptible shortening. The most common case is, that for some time after the accident the muscles retain a ten-

dency to retract, which is increased by opposition, and ceases by-and-by in a favourable position of the broken limb. The idea of subduing muscular action by constant extension, even in compound fracture, is not new; but it had not been tried before by contrivances so dangerous as a plaster of Paris bandage. This is applied under chloroform, which relaxes the muscles; the limb is made straight, and as long as its fellow. When the action of chloroform has ceased, the muscles recover their activity, and are kept in extension in spite of their violent efforts to contract, which often break the plaster bandage. The tension, which is kept up by mechanical means, makes the sensibility rise to a high pitch, and severe inflammation follows. If the plaster bandage be loosely applied, by putting wadding and a flannel roller between, it is often well borne, but the limb is as short afterwards as if no bandage had been employed. While I was writing this in Hanover, on May 1, a young captain came to me, from whose gait no one would have thought that he had had a gunshot fractured thigh in 1870. A plaster bandage had been applied on the third day: he could not bear it. The surgeon who took it off next day told him that the fragments had taken a bad position under the bandage. From this time he was treated without restraint, and cured in six weeks, his limb lying in a wire basket. The shortening was one inch of his left lower extremity. His brother met with the same accident at the same time, but was healed with a shortening of five inches. Large splinters came away by suppuration, some of them being three inches long. The captain came to consult me about his brother. He is in service again long ago.

The danger of early plaster bandages on other parts of the skeleton is less than in the thigh; but it exists and is very great in the humerus, where pressure is very liable to stop the venous current, or to drive a splinter of bone into the brachial artery. I treat these fractures by letting the arm lean on a soft cushion, which is tied to the thorax, the forearm being suspended in a sling. In Schleswig-Holstein I had twenty-four successful cases amongst twenty-nine. One of the German surgeons who took part in the late war—Dr. Rapprecht, of Munich—prefers the plaster bandage; but amongst the three cases which he had to treat there was one which proved fatal on the seventeenth day by hæmorrhage, a splinter of bone having opened the brachial artery.

I differ from Mr. Guthrie, besides, in his appreciation of trephining the skull, which I have tried to exclude entirely from military practice, as useless in some and unnecessary in other cases. I consider a state of coma, from depressed skull, no more

as an indication for applying the trepan than a comatose state in typhus as an indication to rouse the patient from it by any other means but those which are in accordance with his general state—cold, for instance, but not stimulants. As soon as the fragments of skull become detached by suppuration, the comatose state ceases by itself.

The greater difficulty in settling this skull question consists in this—that some patients survive the use of the trepan, or of an early extraction of splinters, and that some recover their senses very soon after the operation. This seems to be a conclusive proof of the legitimacy of active interference. But there is no depending upon it; the patient may die just as well after having recovered his senses completely, and, as experience has shown, more easily than if you let him continue comatose by not disturbing the splinters. This might have been expected, from very solid physiological reasons. By taking away the splinters at an early period, in cases where the dura mater is wounded, you open the arachnoid cavity; air and acrid matter can enter it. Brain substance, when bruised, thus becomes putrid, while it might have been eliminated by reabsorption without access of air. Subcutaneous operation practised in modern times have done a great deal to put more stress on excluding air; but even before their time, Dease and Sir Benjamin Brodie came to a conclusion that access of air was to be avoided in cases of fractured skull, and that no interference ought to take place for depression unless it was warranted by cerebral symptoms. John Hunter was not yet arrived at this degree of caution when he said in his Lectures (Palmer's edition, vol. i., p. 493)—"All fractures of the skull may be called compound; for if not so naturally, they are made so by the removal of the scalp."

In the retrograde tendency of surgical interference with a broken skull it was an important step not to remove the scalp; but other steps were to be argued. An open scalp wound over a broken skull does not produce a great change in the danger of the case. Spreading inflammation of the membranes of the brain or deep-seated suppuration does not necessarily follow from it; but these are very likely to take place if you open the arachnoid cavity by removing the splinters which have kept it closed. When the splinters come away by a very limited suppuration at a later period, the arachnoid cavity is closed by adhesions of dura mater to the brain. It is is often impossible to say, beforehand, whether the dura mater has been open or not. If it is open, the danger is rendered much greater by removing the splinters. The *Medical Times and Gazette* of 1860

contains a list of eighty-three cases in which the trepan had been used, fifty-one of whom died, and thirty-two recovered. Amongst those who did well the dura mater had been wounded; but in three cases the others as well were such that, according to my experience, they might have recovered without using the trepan or early extraction of splinters. Gunshot fractures of the skull are always compound; their successful treatment without active interference deprives this of one of its strongholds—the presence of an open wound, which formerly seemed to permit further violence. During the two Schleswig Holstein campaigns of 1849 and 1850, I had to treat forty cases of gunshot-fractured skull, thirty-three of whom recovered, and seven died. We had one case of trephining with happy result, but it was of that description that it might have done well without interference. The others were subjected to an antiphlogistic treatment by ice, bleeding, purgative medicines, and low diet. The splinters were not removed before being quite loose. I have been blamed by Mr. Pirogoff and others for totally excluding active local interference in gunshot skull fractures; many others have followed my example. You will admit, gentlemen, that there is no knowing of what use a thing may be before having tried it. My object was to know how far we might get without active interference. The result was not unsatisfactory. It was the same thing with the treating typhus patients without stimulants. By trying it on physiological principles, derived from morbid anatomy, I found it very successful. What has pleased me most, from a medical point of view, during the late war, was to find two hospitals in Rheims and one in Versailles where the number of deaths from typhus was not above 8 per cent. Weak broth and some ounces of very sour wine were all the stimulants employed till the fever was over. The wine which I tasted was so sour that it must have contained more acid than common vinegar does, as I know from comparative experiments with potash. So it probably did the same service as phosphoric acid, which I prefer, with a well-boiled water-gruel for diet during the febrile stage. The two hospitals in Rheims were close to each other; in one, the patients were cooled by immersion—in the other, by active ventilation in tents, while the results were quite the same in both. In other hospitals the mortality from typhus amounted to 25, even to 50 per cent. Nothing shows the great value of the medical art and science better than such striking differences in the results of treatment under the same circumstances in regard to constitution, causes, and symptoms.

During the great part of my presence in London I used to see

the surgical patients at St. Bartholemew's Hospital under the care of that clever and highly accomplished surgeon, Mr. W. Lawrence, whose kindness and very instructive conversation I shall never forget. I saw a great number of patients under him with phlegmonous inflammation, who were treated by incisions at an early stage, before suppuration had set in. This bold practice was at that time little known in Germany, where it was spread afterwards, and is generally employed up to this day. Cases of this description do not permit hesitation, and show the use of the treatment very evidently. The effect of an antiphlogistic treatment is not so striking in many other cases. It is only by a longer experience that a surgeon is enabled to say whether a case of fractured skull, or a compound fracture of the limb, has been greatly benefitted by a venesection, which has been made, not in a late period when suppuration is forming, but early, when reaction is taking place, when the face becomes flushed, and the pulse full and hard. Amongst the many wise things which Sir Astley Cooper has said, was the advice to visit a patient with a broken skull three times a day, in order to find the proper time for bleeding him. This does not produce a similar effect like an incision in phlegmonous inflammation; it does not restore the patient's consciousness, but it keeps him alive. That this really takes place can only be judged from other cases in which bleeding at a proper time has been omitted. But bleeding is out of fashion now in Germany as well as elsewhere. The discovery that pneumonia can be cured without bleeding has been the first cause of this antipathy. I have treated pneumonia myself without bleeding, and had very good results. I lost but 5 patients out of 558 during ten years in the general military hospital of Hanover, from 1853 to 1864. Our patients were cupped at once, and took phosphoric acid. I never allowed this to be proof that venesection was equally unnecessary in surgical cases, which have no typical course like pneumonia. It was a mistake of former times that pneumonia might be subdued by repeated bleeding—it runs its course in spite of that. I have tried in vain to maintain its use in surgical practice; there is no swimming right across a mighty stream; one must wait for the proper time of low water to cross it. It must be some years ago that Mr. Syme said bleeding-lancets were to be found in Great Britain no more. This, I suspect, has been the acme of antipathy to bleeding. From that moment it was no more a distinction not to bleed. Bleeding ventures to show its head again in the *Medical Times and Gazette* now rather timidly—recording cases which would have been fatal without venesection. Lancets can be easily supplied again, and a few cabbage-leaves, as Dickens

says, will be sufficient to give a little practice before opening a vein in man. Perhaps I am mistaken in my expectation that bleeding will soon have its turn again. Perhaps I shall be damned in a future time for having been the last of the Mohicans recommending venesection. At all events I would in that case meet very good company—all my old friends in London.

On July 6, 1827, I witnessed the first case of hæmorrhage from thrombosed vein, in St. Thomas's Hospital, under Mr. Tyrrell's care. A shoemaker had been stabbed by his own wife, with an awl, in the right upper-arm. The wound appeared trifling to him —he did not notice it for some days: then an immense swelling of the upper-arm took place; the forearm became gangrenous. Mr. Tyrrell amputated close to the axilla. In examining the separated limb, it was found that the brachial vein had been freely opened by the instrument; that a large hole, filled with coagulated blood, had formed near the vessels. The brachial vein was thrombosed to a considerable extent above the puncture. It struck me that the internal bleeding must have taken place after the obstruction of the brachial vein, and that gangrene had been produced by stagnation. I remembered this case many years later, when I found, in military practice, that secondary hæmorrhages in open wounds take place from similar causes. I described them under the name of phlebostatic hæmorrhages. Other prefer to call them pyæmic, putting little stress upon the venous obstruction. But pyæmia does not always exist in these cases, and the influence of venous obstruction is evident. You will see this if you should happen to bleed again, which must be done by stopping the venous current above the place where you open the vein. Every open wound would bleed under a similar contrivance. Let me observe here, what I have forgotten to mention elsewhere, that capillary thrombosis, of some extent, below an injured vessel must have the same effect as thrombosis of the main vein, because it increases the degree of pressure which the column of blood exerts in entering the limb. The quality of the blood in it must become altered by impediments of either kind, and healthy nutrition cannot be kept up.

These observations are of great interest in military surgery: they teach us to be very cautious in treating wounds which may have affected vessels of considerable size, whose bleeding has been arrested by bruising or by coagula. The injured vessels may heal without hæmorrhage, if the reflux of venous blood remain free; but if there be any obstruction, either by capillary or venous thrombosis, secondary hæmorrhage can occur. Before this takes place the wound often changes its aspect from altered nutrition.

Mr. Guthrie's plan of tying a wounded artery on the spot often does very well in minor vessels, but it often fails in the femoral artery. The large vein accompanying it has often been torn or bruised by the same ball. After tying the artery on the spot, the vein often becomes totally impermeable, and then hæmorrhage recurs, or the limb becomes gangrenous. It may be proper in some cases to gain time by putting a ligature above the wounded spot; before new hæmorrhage occurs, the vein may have undergone a favourable change. In other cases, it is better to amputate at once.

I cannot dismiss Mr. Tyrrell's name here without mentioning how I used to admire his cataract operations. He did them generally by a superior corneal incision of the greatest regularity. I adopted his method of sitting behind the patient's head in operating on the right eye. I had seen Graefe, the elder, in Berlin; Jaeger, the elder, in Vienna, and Roux in Paris, perform extraction as well with the left as with the right hand, but I preferred the more cautious English way. I often thought of Tyrrell's beautiful operations and their results when the time came that iridectomy seemed necessary for the great majority of cataracts before extracting them. I have hailed Dr. Liebreich's innovation as a candid acknowledgment that modern oculists had gone too far in this respect, and that the iris ought to be spared if possible or reasonable.

To Sir Benjamin Brodie I feel very thankful to this day for what I have seen of him in treating diseases of the urinary organs, but chiefly for his skill in diseased joints. He was the first surgeon who enjoined the doctrine of keeping diseased joints at rest by putting them on a splint. The leather splints which he recommended had been partially superseded by starch or plaster bandages, but I use the leather splints constantly in my chronic cases, when the patient is to go out to bathe, or to use other local applications. Sir Benjamin Brodie's influence on the treatment of articular diseases has been great in Germany. His work on the subject has been translated, in 1821, by Dr. Holscher, of Hanover. It had to fight its way in Germany against Rost's authority, who had introduced the red-hot iron as a general remedy for most chronic cases. It is used no more now. The great principle which Mr. Hilton has so ably advocated, of keeping diseased parts at rest, either by mechanical or by physiological means, has done away with the red-hot iron. It was Sir Benjamin Brodie's farther merit to point out cases where articular disease is spurious, and where rest proves hurtful. I consider Brodie's work on local nervous affections, published in 1837, as one of the greatest value on account of the

number of persons who may be benefited by his doctrines. I had given a short extract of it in my "Manual of Surgery," but this had no effect in rousing the public attention. My German countrymen imagined that local nervous affections were a particular gift of nature to English young ladies. Not a month passes but I see a striking case in Hanover. My son-in-law, Professor Esmarch, who travels a great deal during his vacations, has been able to pick out a number of cases in different parts of Germany, and to extricate them from the spider's web of injudicious treatment. Perhaps I ought to have written myself about this subject more at large, but I despaired of doing it better than Sir Benjamin Brodie. Professor Esmarch published a small volume last year on "Articular Neurosis," which, I hope, will go far in spreading Sir Benjamin Brodie's doctrines, whose German translation has failed to produce the desired effect. This subject is intimately connected with the exertions of that great genius, whose discovery of the different roots of motor and sensitive nerves has spread a lustre on our century.

Perhaps no man has given so much to think of to his contemporaries as Sir Charles Bell. He did not live long enough to witness the wide expanse of studies derived from so simple a source as that of the different roots. Bell's researches on paralysis of the facial nerve alone were sufficient to create a number of similar ones. The connection of this illness with rheumatism; the liability which persons have for it who are subject to abdominal affections; to impediments in the circulation of the abdominal viscera, pointed to other diseases with diminished nervous energy —in the organs of sight and of hearing, for instance.

In following the hints given by Sir Charles Bell, I found that every local affection originating from violence, or spontaneous inflammation, was influenced in its course by an enlarged liver or spleen, and that for a cure it is necessary to reduce their size. This accounts for the very general, but more empirical, use of blue pill and bark, and advises us to examine the size of the liver and spleen by percussion, especially in chronic cases which show very little tendency to heal—in secondary or tertiary syphilis, for instance.

Marshall Hall's discovery of the reflex function gave a new stimulus to think on the great importance of Bell's discovery, from which it had taken its origin. This doctrine of the reflex action of the nervous system can only be compared to the discovery of the blood circulation. It gave an idea of the manner in which the nervous action is kept on day and night, and reflex action following the other. Trying to understand this action, I

was led to assume a second principle, which is ultimately blended with reflex action. I found that immoderate reflex action in muscles, or muscular organs, was generally combined with painful feelings, sometimes in the neighborhood, sometimes remote from the seat of spasm. As a similar train of combined sensations must take place during healthy action of the muscles or muscular organs, I guessed that the action of the muscular system was necessary to maintain the nervous energy.

Sir Benjamin Brodie, in his work on local nervous affections, opposes the popular use of the name of spasm for painful feelings. This is the case in Germany. People make no difference between *Krampfe*, spasm, croup, and *Schmerz*, pain. There is some reason for it; where there is spasm there used to be pain, but often in remote parts. Instead of pain, spasm is often combined with altered sensibility, partial or general. The German name for hysteria is "mutterkrampfe," mother cramps. The uterus being a muscular organ, it may well be that hysteria partially consists of habitual spasm of the uterus, as a reflex action from the ovaries, or from other parts of the system. This idea was well known in former times. You can find it in Shakespeare's "King Lear," who is made to say, "How this mother swells up towards my heart."

One of the most striking examples of pain originating in spasm, is that of the glans penis, from contractions of the bladder around a stone in it. Another well-known example is pain in the knee, arising from reflex spasm of the flexor muscles of the hip-joint, from inflammation of its bones, sometimes from other causes.

In a particular case, where there was no inflamed hip-joint, I succeeded in doing away with the knee-pain by dividing the rectus and pectineus muscles. I have pointed out sensations, combined with muscular action, in all the organs of sense and in many cases of disease. I have written on my theory of combined motor and sensitive nervous energy; first, in Hanover, 1837, in the *Gottenger Gelehrten Anzeigen*, an article which I reproduced in Latin, after having become Professor of Surgery in Erlangen. I have followed up this subject no farther, because it would have cost me the exertion of a whole life to carry it to a degree of perfection equivalent to a clear demonstratian by physical evidence. But the fact that every pain, which evidently does not depend upon local alteration of texture, depends on spasmodic action of some muscular organ, has been of great use to me in practice, and I can advise you to put this question to yourself in every case of that description—where is the seat of spasm? Remember that it is as well in the voluntary as in the involuntary ones that spasms can

take place. Perhaps you little suspect that the liver is an organ whose muscular energy is of great importance. But if you had felt the pain in passing a biliary calculus, you would think otherwise. I have felt it myself, and took six grains of opium in one night for it.

Pains in remote parts of the body are very frequent in liver complaints, in the shoulder, in the head, or in other parts. I could tell a great number of cases in which local nervous affection of an extremity proceeded from the liver, others from the accumulation of hard fæces in the large intestines, keeping up spastic action for their expulsion. It is very easy to cure them, after having found the real cause, without any topical application whatever to the affected limb.

After having spoken of such a variety of things and for such a length of time already, let me bid you farewell now, gentlemen, and thank you heartily for the kind attention with which you have been listening to me. I wish you may remember your studies in London with the same feelings of gratitude and satisfaction as I do after forty-four years of practical life.—*Medical Times and Gazette.*

Medicine.

THE TREATMENT OF SMALL-POX BY VACCINATION AND THE INJECTION OF LYMPH.

By R. C. Furley, L.R.C.S.

The doctrine universally held, that vaccination will be of "no use" if delayed till five days after the inhalation of the germ of variola, I think, is erroneous. For some time past I have been in the habit of vaccinating every case of small-pox that has come under my care; and the result, as I show, is very encouraging, and seems to indicate that vaccination is not only prophylactic but *curative*. I have found, however, that, although the ordinary process of vaccination by scratching the arm is sufficient to modify the disease in infants, it is almost inoperative in adults. After having discovered that the ordinary process was almost useless in grown-up persons, I adopted the method of injecting lymph by means of Dr. Wood's hypodermic syringe. This instrument I also found occasionally to fail, because, on passing the wire through the needle after the operation to keep it clear, I have found it eject the lymph which I had hoped had been in the blood. This, I am afraid, has been the cause of two otherwise unaccountable failures

out of sixty cases. How to obviate this source of fallacy occupied my thoughts for a considerable time. At last, however, I succeeded in inventing an instrument that promises to transfer lymph directly from the tube in which it is contained into the circulation. It consists of a hollow needle with a bore sufficiently large to admit of the introduction of a vaccine tube. The process consists in passing the point of the needle, charged with a tube of lymph, under the skin, and blowing the lymph directly into the blood. I have purposely described this minutely, in order that, if any of my brethren do me the honor of verifying the results of my treatment, they may not commit the errors which experience has pointed out. It would occupy too much space to describe many cases; I shall therefore only give three to illustrate the effect of the treatment at the different periods of life—infancy, childhood, and manhood.

Case I.—Baby C., aged one month, and unvaccinated. When first seen, the papular eruption was over the face, hands, and legs. There had been three cases of small-pox in the house. One had been sent to the Small-pox Hospital, where the mother had visited him. I ascertained that this was really the case from the resident physician, Dr. Saxby. I vaccinated the child at once. Next day, when I called, the eruption had entirely disappeared, with the exception of two papules on the face, which were now more prominent. On the third day these two papules disappeared, and a fresh crop of four-and-twenty, chiefly over the head, made its appearance; and these became hard, and did not fill like ordinary vesicles. In three days these had also disappeared. The vaccination itself did not show any signs of taking till the tenth day, and was matured on the thirteenth.

Case II.—M. R., aged thirteen years, vaccinated in infancy, and whose sister had died of small-pox a week before. I was called in on a Saturday, and found her face considerably swollen, and the papular eruption on the hands and forearms. I at once *injected* two tubes of lymph into the arm. On Sunday the eruption had disappeared from the hands and arms, and appeared on the feet. On Monday it had spread up the legs and trunk. On Tuesday it had entirely gone away, and there was nothing to be seen but the inflamed areola at the point where I had injected.

Case III.—J. W., aged thirty-four, a stableman of dissipated habits, and never vaccinated. I saw him on the second day of the eruption, and injected two tubes of lymph. The case, instead of being confluent, as might have been expected, was discrete, except at the alæ of the nose. He went on very favorably, and the eruption began to desiccate on the ninth day instead of on the fif-

teenth, eighteenth, or twentieth. There was no areola at the point of injection.

I think these cases, selected from a number of such, show that there is, at least, a germ of truth in my statement that vaccination is curative of small-pox. I find that the treatment is much more successful in the youthful than in the adult period of life; and I am beginning to think that this arises from adults requiring, as it were, more of the remedy. It is also more effectual the earlier the operation is performed. I have usually found that the vesicles did not attain the size they do when the disease is allowed to run its course; they do not often become pustular, and desiccated earlier.

No doubt I have had failures and deaths; the latter five in sixty cases, in three of which I did not look for recovery from the first on account of other complications, and two were unlooked for: all were females—a fact of itself of some significance. I reserve for a future communication a detailed summary of all my cases; meantime I trust I have said sufficient to encourage my brethren calmly to investigate the subject.

I should have mentioned that the instrument I employ for transferring the lymph directly into the blood was made for me by Mr. Young, cutler, North-bridge.

Lauriston Place, Edinburgh, May, 1872. —*The Lancet.*

ACTION OF DIGITALIS.

M. Gourvat (*Gazette Médicale*, 1871, Nos. 29, etc., and 1872, 1, 2, 4, 5,) finds that moderate doses of digitaline given to the frogs paralyze the motor nerves of voluntary muscles; and larger doses destroy the irritability of the muscles themselves. Involuntary muscular fibres appear to be stimulated by it. Moderate doses cause a transient contraction of the arterioles; large doses cause a longer contraction. In both cases the contraction of the arterioles is succeeded by paralysis and dilatation. The contraction is caused by the action of the digitaline on the vaso-motor nerves, and not on the walls of the arterioles themselves. The beats of the heart are rendered stronger, slower, and more regular, by moderate doses. The arterial tension is increased. The retardation of the pulse is due to the increase in the arterial tension, and is proportioned to it. The contraction of the arterioles lessens the secretion from the skin, mucous membranes, and glands, except the kidneys, the urine being increased.—*Med. and Surg. Reporter.*

CANADA

Medical and Surgical Journal.

MONTREAL, JULY, 1872.

THE CANADA MEDICAL AND SURGICAL JOURNAL.

For the past eight years we have conducted the *Canada Medical Journal*, and it is not for us to state how far that periodical has given satisfaction, nor what amount of influence for good it has done amongst the profession generally. We did endeavor to make it a scientific periodical, and we feel proud at the thought that many important papers have appeared for the first time in its pages. A change has taken place in its management, inasmuch as the editors determined to separate, because of reasons personal to themselves, the details of which would be uninteresting to our subscribers.

The present periodical, under the editorial charge of the senior editor of the old journal, is a separate and distinct work. We shall endeavor to conduct it on the same broad principles which guided us in the management of the old journal. It is not the special organ of any school, and although we are connected with McGill University, yet we will endeavor to give equal justice to all the teaching bodies of our country. The present number will be sent to all the subscribers to the old journal, and we solicit a continuance of their patronage.

We issue this periodical on the first of the month, and no exertion will be wanting on our part, to make it a regular and welcome visitor. We will endeavor to extend the circulation, and should the support given us by the profession warrant it, we will either reduce the price of subscription or else add to the amount of reading matter.

In commencing this work, we do so feeling the responsibility assumed, as we have added to our editorial charge the risk of publication at our own expense. We trust, therefore, that those of our friends who desire to see an independent periodical prosper, will not only continue their subscriptons, but will aid us in giving it a truly Canadian character, by sending to our pages, for publication, a record of their observations, which will be serviceable in

the best interests of our profession. It becomes every man's duty; a duty he owes to himself and to his profession, to carefully note the record of all cases of general interest. All observations, however trivial they may appear at the time, have a direct bearing on the advancement of the healing art; perfection is alone to be attained by practical observations, and each case is of importance to record, as forming a part of the general history of disease. We trust, therefore, that these few observations will be looked upon favorably, and that each professional brother will consider himself bound, by a sacred tie, to the general brotherhood of earnest workers and independent thinkers, and will regard it as a duty to observe carefully, and record accurately and truthfully, the cases which may come before him. There are those who, through diffidence, neglect to publish a report of their observations. There are others who regard the cases of every-day observation as unworthy of record; but, we must remark that the phenomena of diseased action cannot fail to be of interest.

We remember some years ago, in accompanying a friend of high scientific attainments round the wards of our hospital, remarking that we regretted that the cases of interest were so few. "Ah," he replied, "every case however trifling, should possess deep interest to the scientific observer." We felt justly rebuked by the force of the observation, and have endeavored, since that time, to feel and take an interest in watching the operations of nature in the course of disease. It is, indeed, the entire business of our professional career; it becomes our duty, as it should be our earnest wish, to do all things well, and do them with our might.

This journal will be devoted to the record of cases from purely Canadian writers on several occasions. We have received letters from medical men, requesting to know on what terms their papers would be published; to such we would observe that this is to us a labor of love. The present position of the journal does not warrant the expenditure of money to secure communications which might be of very questionable value. We think that the publication of papers should be regarded as sufficiently remunerative to the writers, as, if they possess merit, the extended circulation which these papers receive, through the medium of the journal, is sufficient in itself, or should be regarded as such by the authors, as they will without fail, reach the eye of the profession generally, as well in our own country as abroad. Literary pursuits are well known to be unremunerative, and it requires a genius with the imagination of a Dickens to secure by his pen a competency for his retiring years. The worst paid of all literary men are physicians and surgeons, when they do enter the lists.

THE "CANADA LANCET" AND CANADIAN GRADUATES.

At the risk of exciting the ire of our cotemporary, the *Canada Lancet*, and of again being called "vulgar and intemperate," we refer to an article in the June number of that periodical, although we did intend to pass it by in silence. We certainly did oppose the Ontario Medical Act, and we do still, as we think our friends in the West have considerably lowered their dignity by amalgamating with persons whom they cannot regard as legitimate members of the profession.

In Lower Canada all practitioners have to hold the license of the College of Physicians and Surgeons, and a similar law could have been procured in the Western province had the profession been true to itself. We remember well the time when a similar Act to our own was sought for, and also the political juggling which was practiced by some Upper Canada members of the Legislature on that occasion to upset the Bill, which opposition was, unfortunately, successful. This, in a great measure, was the result of a want of concerted action on the part of the profession. There was no harmony, no apparent desire to secure a general Act, which would have been beneficial, and when the irregulars sought for Legislative powers they were unopposed, because the profession thought that by permitting them to become incorporated they would strengthen their own position in securing a Bill which had received the six month's hoist. The profession of to-day, are suffering the consequences of the want of watchfulness on the part of their former representatives, but we think that their present position is worse than before the passing of the Ontario Medical Act.

They have legalized and given professional status to men who held no such position before the passing of the Ontario Medical Act; nay, more, these persons possess greater powers and larger representation at the Council Board than do members of the regular profession. The *Canada Lancet* may rely upon it that there still remains a large mass of the old leaven, and that this fresh outburst, as it is termed, is merely a repetition of views we have always held, and which, we fear, will continue to be maintained by us. We have watched the course of medico-political changes, and we see, in the action of our Western brethren, many moves which are, to say the least, questionable. We fear there is trouble ahead; still, by united action the profession, undoubtedly, will overcome their difficulties. We do not, however, think it wise to hold out inducements to any set of men to enter the profession, save through one portal. Since the profession in Ontario hold that position at present, let them guard the portals and admit none but those fully prepared with the watchword and passes.

We have seen the attempts of the irregular men to wriggle themselves out of the position; they seek emancipation. It would be our idea to break the bond of union, and erase every name from the register, and allow them freely to flood the country, if they wish, with fellows of their kind. We have faith and confidence in the truthfulness of our art. There are scientific facts which come home to the people of a country, and although they may be led astray by the glitter of tinsel, they will sooner or later discover for themselves that it is base metal.

MEDICAL AND SURGICAL REPORT OF THE MONTREAL GENERAL HOSPITAL FOR THE YEAR ENDING APRIL, 1872:

DISEASES, ACCIDENTS, &c.

Diseases, &c.	Discharged.	Died.
Abscessus Var	35	..
Adenitis	1	..
Ambustio	9	1
Amenorrhœa	1	..
Anæmia	14	..
Anchylosis	5	..
Aneurism Aortic	2	2
" Abdom	..	1
Anthrax	1	..
Arthritis Ch	1	..
Ascites	1	1
Ataxia Locom	1	..
Atroph. Testis	1	..
" Optic	1	..
Balanitis	1	..
Bronchitis Ac	39	..
" Ch	9	..
Bubo	13	..
Bursitis	4	..
Calculus Vesicæ	3	..
Carcinoma Axillar	1	..
" Facies	1	..
" Mammæ	4	..
" Recti	1	..
" Uteri	..	1
" Ventric	3	2
" Var	1	1
Caries Femoris	4	..
" Humeri	2	..
" Maxil. Sup	1	..
" Os Nasi	1	..
" Os Tarsi	1	..
" Phalangis	2	..
Cataracta	8	..
Cellulitis	4	1
Cephalagia	1	..
Cerebritis	2	..
Chlorosis	1	..
Cholera Canadens	1	..
Chorea	1	..
Cicatrix	4	..
Cirrhosis Hepat	1	..
Condylomata	3	..
Conjunctivitis	3	..
Constipatio	11	..
Contusio	42	..
Cystitis	9	..
Debilitas	28	2
" Senilis	3	1
Delirium Tremens	..	2
Diabetes	2	..
Diarrhœa	17	..
" Chron	..	1
Dysenteria	14	..
Dysmenorrhœa	3	..
Dyspepsia	19	..
Ebriositas	1	..
Ecthyma	1	..
Eczema Ac	2	..
" Ch	5	..
Emphysema	..	1
Empyema	..	1
Endometritis	2	..
Enteritis	5	3
Entropion	2	..
Epilepsia	6	2
Epistaxis	2	..
Epithelioma	8	..
Erysipelas	24	3
Erythema Nodos	14	..
Favus	1	..
Febricula	44	..
Febris a Potu	15	..
" Intermit	9	..
" Post partum	5	2
" Typhoides	41	8
Fissura Ani	1	..
Fistula in Ano	1	..
" Ureth	3	..
" Vesic Vagin	1	..
Fractura Calvic	4	..
" Costar	11	..
" Cranii	1	1
" Cruris	12	..
" Cruris Co	5	2
" Femoris	12	..
" Femoris Co	..	2
" Fibulæ	5	..
" Humeri	10	..
" Maxil Infer	2	..
" Metacarpi	1	..
" " Co.	1	..
" Metatarsi	2	..
" Patellæ	2	..
" Pelvis Co	1	1
" Phalang Co	5	..
" Radii	7	..
" " et Ulnæ	5	..
" " " Co	1	..
" Vertebræ	1	..
Furunculus	5	..
Gangræna	1	..
Gastrodynia	8	..
Gelatio	12	..
Glaucoma	1	..
Gonorrhœa	14	..
Hæmoptysis	1	..
Hæmorrhoides	1	..
Hemicrania	1	..
Hepatitis	1	..
Hydrocele	5	..
Hypochondriasis	1	..
Hysteria	15	..
Icterus	3	..
Impetigo	1	..
Infiltratio Urinæ	2	..
Insolatio	2	..
Iritis	1	..
Keratitis	8	..
Laryngitis Ac	8	..
" Ch	1	..
Lepra	4	..
Leucoma	1	..
Leucorrhœa	2	..
Lichen Ruber	1	..
Lupus	4	..
Luxatio Clavic	1	..
" Humeri	2	..
" Rad et Ulnæ	1	..
Mania	1	..
" Puerperal	1	..
Mastitis	1	..
Meningitis	..	1
Menorrhagia	2	..
Metritis	1	..
Morbilli	10	..
Morb Brightii	7	8
" Cordis	11	3
" Coxæ	3	..
Myelitis	1	..
Necrosis Femoris	5	..
" Humeri	2	..
" Phalang	1	..
" Tibiæ	1	..
Nephritis Ac	2	..
Neuralgia	18	..
Onychia	1	..
Ophthalmia Gonor	3	..
" Scrof	1	..
" Tarsi	5	..
Orchitis	10	..
Otitis Ac	2	..
" Ch	1	..
Oxaluria	1	..
Palati Fissura	1	..
Paralysis Var	2	1
" Partial	1	..
" Vesicæ	1	..
Paraphymosis	1	..
Paronychia	7	..
Parotitis	1	..
Periostitis Ac	4	..
" Ch	2	..
Peritonitis	2	2
" Pelvic	1	..
Phthisis Ac	..	2
" Ch	36	18
Phthiriasis	1	..
Phymosis	1	..
Pleuritis Ac	4	..
" Ch	1	1
Pleurodynia	9	..
Pleuropneumonia	12	1
Pneumonia	20	5
Polypus Nasi	1	..
Prostatitis Ch	1	..
Prurigo	2	..
Pyæmia	..	3
Pyelitis	1	..
Ranula	1	..
Retinitis	2	..
Rheumatism Ac	40	1
" Ch	15	..

DISEASES, ACCIDENTS, &c.—*Continued.*

Diseases, &c.	Discharged.	Died.	Diseases, &c.	Discharged.	Died.	Diseases, &c.	Discharged.	Died.
Rheumatism Musc.	17	..	Synovitis Ch.	2	..	Tumor Max Sup.	1	..
Rupia	1	..	Syphilis Ac.	47	..	" Palati	1	..
Scabies	1	..	" Ch.	13	..	" Testis	1	..
Scarlatina	5	..	Tetanus Traumatic.	..	1	" Uteri	2	..
Sciatica	5	..	Tonsillitis	15	..	Ulcus Corneæ	10	..
Scrofulosis	3	..	Torticollis	1	..	" Recti	4	..
Sinus	1	..	Toxicatio	1	..	" Uteri	9	..
Staphyloma	1	..	Trachoma	19	..	" Var	58	1
Strabismus	3	..	Trichiasis	2	..	Uteri Antiflex.	1	..
Strictura Recti	1	..	Tumor Abdom	1	..	Varicella	3	..
" Urethræ	8	..	" Adipose	4	..	Variola	34	33
Subluxatio	4	..	" Axil.	1	..	Varioloid	47	..
Sycosis Menti	1	..	" Colli	1	..	Vulnus	30	..
Symblepharon	2	..	" Cystic	2	..	" Oculi	1	..
Synovitis Ac.	10	..	" Fibrous	2	..			

Discharged..... 1,356 Died..... 123 Total..... 1,479

MAJOR OPERATIONS.

Amputation of Arm	3	Brought forward	25
" Breast	3	" Elbow-joint	3
" Leg	5	" Knee	1
" Thigh	3	Extraction of Cataract	6
Excision of Tumor Axil	1	Extirpation of Eyeball	1
" " Epith. of Lip	1	Ligation of Interosseous Artery	1
" " " Palati	3	" Radial "	1
" " Gland. of Neck.	2	Paracentesis Abdominis	4
" " Fibrous	1	" Thoracis	3
" " Fibroid	1	Perineal Section	5
" " Malignant	2	Staphylorrhaphy	2
Carried Forward	25	Total	52

MINOR OPERATIONS.

Abscision of Uvula	4	Brought forward	546
Amputation of Fingers	23	Operation for Fistula in Ano	3
" Toes	8	" Entropion	2
Catheterisms	162	" Lachrymal Fistula	1
" of Nasal Duct	8	" Strabismus	2
Cauterization of Cystic Tumor	7	" Bowman's	1
Epilations	15	Paracentesis Oculi	12
Evulsion of Aural Polypus	4	Reduction of Paraphymosis	6
" Nasal "	1	Removal of Foreign Bodies	8
" Nail	6	" " " from nose	4
Excision of Epithelioma	2	" Sequestrum	8
" Cystic Tumors	12	Skin Grafting	12
" Fatty Tumors	2	Tapping in Hydrocele	12
" Fibroid Tumors	3	Teeth Extracted	207
Extraction of Bullet	1	Tenotomy	4
Incisions, Various	289	Vaccinations	116
Iridectomy	1	Wounds Dressed	515
Carried forward	546	Total	1,366

Total Major Operations..... 52
" Minor " 1366

Grand Total..... 1418

FRACTURES.

IN-DOOR.

Simple	76
Compound	18
Total	94

OUT-DOOR.

Fracture of Clavicle	5	Brought forward	37
" Humerus	6	Fracture of Radius & Ulna	6
" Lower Jaw	2	" Ribs	2
" Phalanges	2	" Scapula	1
" " Co.	2	" Ulna	2
" Radius	20		
Carried forward	37	Total	48

Grand Total 142

DISLOCATIONS.

IN-DOOR.

Dislocations of Shoulder	3
" Elbow	1
Total	4

OUT-DOOR.

Dislocations of Elbow	1
" Shoulder	8
Total	9

Grand Total 13

We publish above the Annual Medical and Surgical Report of the Montreal General Hospital, this being the Fiftieth Anniversary of that excellent charity. In looking over the financial statement we find that there was a surplus after all liabilities were paid. This is very encouraging, and is a further proof of the interest taken by our citizens in the success of this noble institution.

When we compare the medical reports of to-day with those of a few years back, we notice the great increase of the surgical cases which are submitted for treatment. This can be accounted for from the fact that Montreal is fast developing her factory facilities. We doubt not that in a few years the city will so extend in every direction that it will be found necessary either to add to our Hospital accommodation or, possibly, provide other institutions of a kindred character.

We trust that the Governing Board will, this year, see the urgent necessity of removing the present small-pox hospital to a more suitable locality, as it is unjust to the occupants of the General Hospital to submit them to the danger of contact with so fearful a malady.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

The Science of Meteorology—Its Utility—The Necessary Instruments and How to Use Them. By Mr. Thomas D. King, Montreal.

It cannot have escaped the attention of those whose acquirements enable them to judge, and who have the opportunities of examining the state of Meteorological science in England and the United States, that in Canada, more particularly in the Province of Quebec, with respect to the simplest weather reports, the amount of rain fall and the multitude of causes by which the atmosphere is influenced either for the benefit or destruction of animal and vegetable life, we are almost in a state of ignorance.

That a city like Montreal, eminently distinguished for its commerce, for its manufactories, and for its philanthrophy, should be indifferent to the progress of inquiries which are so necessary; and that the medical faculty should be dependent upon the observations of persons whose reports are published at their own discretion, is a fact which is well deserving the attention of those who shall inquire into the causes that influence the scientific progress of the neighbouring States. In them are Observatories and Scientific Institutions founded and endowed by private citizens, and supplemented by grants from Congress, for the discovery of new truths, and for the diffusion of these among men. There is also a large staff of private observers, as well as those belonging to the U. S. Army Corps, in all many hundreds, who contribute to Meteorological Science, serving to place in a clear point of view, the connexion of climate with the natural productions of different parts of the earth.

That the state of knowledge in any country will exert a directive influence on the general system of instruction adopted in it, is a principle too obvious to require investigation. And it is equally certain that the tastes and pursuits of our manhood will bear on them the traces of the earlier impressions of our education. It is not therefore unreasonable to suppose that the neglect of

science, we may almost say, the utter neglect of science, in the Province of Quebec, may be attributed to the system of education we pursue.

Young men pass away from our Public Schools, Colleges, and Universities, ignorant almost of every branch of useful knowledge, more particularly of the application of science to Arts and Manufactures. Our system of education may attribute in some measure to the fact that amongst the wealthy and middle classes, scientific knowledge scarcely exists. Those who have chosen the profession of medicine, may have a slight knowledge of Chemistry, Zoology, Botany, Vegetable Physiology and Mineralogy, but they rarely possess a knowledge of those physical laws which brought forth a Dalton, a Davy, a Faraday—nevertheless, there is a knowledge which they ought to possess, viz.: The peculiarities of the atmosphere which affect the functions of organized bodies. It would be productive of useful results, if physicians of extensive practice, more particularly those attached to our Infirmaries and Hospitals, would make accurate meteorological registers, especially during the prevalence of any epidemic or contagious disorders; not that it must be considered that atmospheric peculiarities alone produce epidemic and other complaints, which must be regarded as having a compound origin, and as resulting from the operation of peculiar states of atmosphere on persons of particular states of constitution; otherwise all persons would be affected, which is contrary to experience. Of this there can be no doubt that the affect of atmospheric changes upon ordinary diseases requires more attention from medical men than it has hitherto received.

My object is not to write a treatise on meteorology; that task has been done by many able men —— those who have the leisure to go deeply into the subject and wish to become acquainted with scientific meteorology, will find that the following works exhaust the topic, viz.:—

Luke Howard, 'Climate of London.'
Daniell, 'Meteorological Essays.'
Kaemtz, 'Meteorology.'
Drew, 'Practical Meteorology.'
Glaisher's, 'Hygrometrical Tables.'
James, 'Instructions for Taking Meteorological Observations.'
Fitz-roy, 'Weather Book.'
Proceedings of the Meteorological Society.
Journal of the Scottish Meteorological Society.
Symons, 'British Rainfall' and 'Meteorological Magazine.'

Steinmetz, 'Manual of Weathercasts' and 'Sunshine and Showers.'

Smithsonian Institution Publications.

'Directions for Meteorological Observations and the Registry of Periodical Phenomena.'

'Tables, Meteorological and Physical,' prepared by Arnold Guyot, Professor of Geology and Physical Geography, College of New Jersey.

To the pages of some of these I am indebted chiefly for the few concluding remarks I shall deem necessary to make. The subject is an important one, and at the same time for all practical purposes very simple, it requires no overwhelming attention; the observer does not require to be well acquainted with mathematics or astronomy; he does not require like some ambitious of scientific distinction to have attached to his name a kind of comet, carrying with it a tail of letters, such as L.L.D., D.C.L., F.R.S., F.M.B.S., F.L.S., etc.; the observations demand no unrivalled accuracy, but mere ordinary care, such as would be required by a schoolboy in a common sum of vulgar fractions.

My object is not to satisfy the requisitions of Science, but to induce those who have not hitherto paid any attention to the subject to do so at once, and to form, if possible, in the Province of Quebec a Meteorological Society, for the purpose of collecting observations on the weather, the amount of rain-fall, and the registry of periodical phenomena, which can be published monthly in this journal.

To the readers of this journal it is not necessary to say that an acquaintance with the science of Meteorology, together with the observance of instrumental and natural signs of the changes and conditions of the atmosphere about us, enable the formation of a foreknowledge of the kind of weather, as of storms, excess of heat or cold, drought or rain. To seamen, fishermen, farmers, gardeners, builders, engineers, travellers, more than the generality of people, such foreknowledge is of great value, on account of their pursuits being greatly affected by changes in the weather. Indeed, the personal safety and comfort of everybody, in a greater or less degree, must be promoted by the ability to prognosticate the extremes of the weather.

It is now well known that variations in the intensity and duration of sunshine, the exposure to humidity, and the amount and frequency of rain and snow, have highly important influences upon the development and growth of crops. A farmer would, therefore, undoubtedly acquire increased experience and knowledge of the varied operations of his calling, if he were to register weather obser-

vations upon a simple but uniform plan, noting all the signs afforded by nature. The blights which affect vegetation, such as the mildew and smut of wheat; the fungus, which attacks the vine; the fly, which destroys the hop and the turnip, may all be dependent upon atmospheric conditions, which attentive observations may detect.

It will now be necessary to say a few words about

METEOROLOGICAL INSTRUMENTS, AND HOW TO USE THEM.

The instruments absolutely required for prognosticating the weather, are few in number, and such as need very little practice to secure accurate and useful information. Meteorological investigators must be cautioned against the so-called "cheap" instruments paraded in the shops, as utterly useless and likely to disgust them with the science. It is certain that no one need be without good, reliable instruments on account of the cost. The best instrument-makers in England seem all anxious to meet the views of those who wish to devote a portion of their time to the development of meteorology; and one of them, Mr. Pastorelli, of Piccadilly, London, has designed a complete set of instruments at a very moderate cost, the barometer having been examined by Mr. Glaisher, of the Greenwich Observatory, the well known meteorological authority, and certified to read correctly to ·01 or ·02 with the standard, and the remainder of the instruments verified at the Observatory of Greenwich.

A set of the out-of-door instruments, fixed on a neat stand, would form an ornament to any lawn or grass plot near the house, and one of our daughters or sons might undertake the daily inspection of the instruments and keep the register of the weather. Fathers of families have thus the means of introducing into their homes a new feature of interest, and even of utility; for there would thus be in every family a reliable weather-prophet, whose timely advice might prevent exposure to many a drenching, and to the damage and health of garments. Excursions would not, if the Barometer and Hygrometer were consulted, be undertaken in the utter uncertainty as to the weather that is likely to attend them. Besides, it is no small satisfaction to be able to know when we are likely to need umbrellas, and when we may leave the encumbrance at home although the sky be overcast and cloudy. This degree of certainty is within the reach of all of us, with the aid of the requisite instruments.

In all public schools such a set of instruments should form part

of the daily study; and we have no doubt that our young ones would take to it as kindly as to any other pursuit likely to excite their natural curiosity.

I shale now proceed to notice succintly the various instruments required in the investigation of the weather.

THE BAROMETER.

This instrument indicates the changes in the weight, or rather the elasticity of the air; the more elastic the air, the finer the weather, and the higher the barometer. The elasticity of the air being diminished, the barometer falls proportionately to the disturbance causing bad weather.

In fixing the barometer, select a position commanding a good light, but not exposed to sunshine, and adjust the tube to a vertical position by means of a plumb-line. Before reading the instrument, tap it gently a few times, as the mercury is apt to adhere to the tube. In reading, let the eye be placed on the exact level of the mercurial column, so that the eye, the back and forepart of the index, and the top of the column be in the same horizontal plane.

In forming a judgment of forthcoming weather, the point at which the mercury stands should not be so much regarded as whether it is rising or falling; and much consideration should habitually be given to its movements during the previous two or three days. Different latitudes and elevations above the sea have their peculiar *par-line*, or average height of the barometric column.

The varying pressure or elasticity of the air, as shown by the barometer's rise and fall, must have some specific influence on the public health, the *fall* being attended with aggravation or production of diseases of an inflammatory or haemorrhagic character, the rise producing or aggravating those of a plethoric character, such as pulmonary and cerebral apoplexy, congestive bronchitis, etc. On the other hand, increased atmospheric pressure exercises a sedative influence on the respiration and pulse, diminishing the frequency, but generally increasing the force of both. The lungs are more fully expanded, the blood is more completely oxygenated, and the nervous and digestive organs acquire increased vigour—as forcibly shown by the vigour of our "jolly tars," whose life is passed "on the ocean wave" or "the sea-level."

THE THERMOMETER.

The intelligent observation of the thermometer should always accompany that of the barometer.

The thermometer should be placed so as to be freely exposed to the surrounding air, and protected from the effects of reflected heat, radiation, and rain. The instruments should always be read when we read the barometer.

DRY BULB THERMOMETER.

This and all out-door thermometers should be read to tenths of degrees; it is very easy to estimate these parts of a degree. Always look square at a thermometer, or you will read it too high or too low; read it as quickly as practicable, and don't breathe upon it.

WET BULB THERMOMETER.

Muslin to be kept clean, changed every month or so. The water used should be either clean rain or distilled. Hard water deposits salts on the bulb and hardens the muslin. In frosty weather the bulb should be wetted with water at about 45 degrees, fifteen minutes before observing.

MAXIMUM THERMOMETER.

Whether this be constructed on the plan patented by Negretti or on that of Professor Phillips, it is to be used in a horizontal position; the reading of the end of the column furthest from the bulb is the maximum, and the instrument is reset by lowering the bulb end; sometimes they require a more or less smart shake, of course gentle means should be tried first.

MINIMUM THERMOMETER.

There is at present nothing better than Pastorelli's spirit thermometer for general use; the position of the end of the index furthest from the bulb is the reading to be entered, and the instrument is to be set by raising the bulb so that the index may fall to the end of the column.

The Thermometers should be constructed so as to be without errors, or to have errors less than 0·5 of a degree, which may be neglected for ordinary purposes, and applied when using the observations for scientific purposes.

HYGROMETER, OR DRY AND WET BULB THERMOMETER.

The bulb of the wet thermometer is covered with thin muslin round the neck of which is twisted a conducting thread of lamp-wick, common darning cotton, or floss silk; this passes into an adjacent vessel of water placed at such a distance as to allow a length of conducting thread of about three inches. The cup or glass should be placed on one side and a little beneath, so that the water within may not affect the reading of the dry bulb by its too near vicinity.

Use of the Instrument to the Sick Chamber.

The importance of this instrument to the requirements of a sick chamber are scarcely to be over-rated, and will be at once obvious to all who know that the comfort of the patient is dependent not so much on the temperature, as on the hygrometric condition of the air. In our long winters the air of the apartment when heated with stoves, is not unfrequently too dry, in which case the difference between the readings of the two thermometers will be great, and this condition will be manifest to the sufferer by the degree of inconvenience he will experience attributable to this cause. If the air be moist, the difference between the readings will be less in proportion to the degree of moisture; and if the air be saturated, the readings will be alike. *It would be well for the medical profession to enforce, as far as lay in its power, the use of this simple and effectual instrument, which at all times is valuable with reference to the record of external temperature, as well as hygrometric conditions of the air, and which in case of sickness gives indications so important to the comfort and convalescence of the patient.*

If the hygrometer shows increasing dampness by the difference of the readings becoming *smaller*, then *rain* may be expected; but if the hygrometer shows continuing or increasing dryness, by the reverse, then we may expect more wind, without rain.

The dryness or humidity of the air has the greatest influence on the development of diseases, and therefore this instrument should be the test of the climate of places to which invalids are sent for the recovery of health. In the open sea the air seems to be in a state of saturation, and the quantity of vapour is greatest on coasts, diminishing as we approach the interior.

The hygrometer should be in universal use in our changeable climate, not only during hay-making and the all important time of harvest, but also to do away with the many doubts about the weather from the mere appearances of the sky, causing the great inconvenience of carrying umbrellas, when not likely to be required.

RAIN GAUGE.

This instrument informs us of the quantity of rain that has fallen at any given time. There is a great variety of forms, but perhaps the best and the simplest is Howard's Rain Gauge.

The Rain Fall throughout Canada is very varied in its amount in different localities, depending upon the peculiar features of the country.

The following table shows the equivalent of rain in inches, its weight per acre, and bulk in gallons :—

Inches of rain	0·1	0·2	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1 in.
Tons, per acre	10	20	30	40	50	61	71	81	91	101
Gallons, per acre	2262	4525	6787	9049	11312	13574	15836	18098	20361	22623

The following fact will give some idea of the quantity of rain that falls in showers, and the amount of human labour by hand irrigation that would be required for an equivalent. Suppose a flower-garden 22 yards square (a tenth of an acre,) how many cans of water are required to equal *half an inch* of rain—a very moderate amount for a thunder-shower?

If the can holds four gallons (i.e. 40lbs.) of water, it will require to be filled 282 times, or, to put it in weight, 5 tons of water would have to be supplied.

WIND DIRECTION.

Observers should not rely upon weathercocks for the direction of the wind. It is better to watch the way clouds are drifting; they are steadier in their course than vanes, flags, streamers, or even smoke, driven by the surface wind. Moreover, weathercocks are sometimes set incorrectly; either the variation of the compass has not been allowed for, or it has been applied the wrong way.

The meteorological instruments required for ordinary observations in the pursuit of weather wisdom are few:—Barometer, Hygrometer, Self Registering Thermometers, Rain Gauge.

A little practice will render the duty quite easy, and enable the observer ere long to judge for himself concerning coming weather. To doubt that science of weather is possible, would be to doubt that atmospheric disturbances are governed by fixed laws. But, indeed, a wonderful change has taken place in this respect of late years. Formerly most *savans* scoffed at the idea of predicting the weather; and Arago, the French astronomer, said that no scientific man, anxious for his reputation, would venture upon such a thing even for the space of a single day. But now it is just the reverse; those most acquainted with meteorology are the staunchest believers in the ultimate probability of "doing the thing" to the world's great satisfaction. Indeed, had one-half of the time and research devoted to sidereal astronomy been spent in observing and registering changes which any one may notice, but which no one has yet succeeded in predicting or interpreting, meteorology would not be still "in its infancy" after a birth thousands of years ago, nay, coeval with the first appearance of man upon earth, to observe "the signs which are in the firmament of the heavens."

Hospital Reports.

Medical and Surgical Cases Occurring in the Practice of the Montreal General Hospital.

Case of Acute Rheumatism, under the care of Dr. R. P. Howard. Reported by Mr. J. C. Cameron.

J. B., æt 22, was admitted into the Montreal General Hospital, February 20th, 1872.

Previous History—Is a carter, drives at night a good deal, and is very liable to catch severe cold. Was admitted the fourth day of his illness. The pain took him first in the chest, pain was severe and in stitches. Then it went to both ankles and then up to the thighs and knees.

Present Condition—When admitted there was considerable effusion into both knees and ankles. The left knee and ankle pained the worst. No signs of cardiac irregularities whatever. Pulse 84; Resp. tranquil.

Treatment—Poultices to the knees and ankles. Blisters about two inches in width, round the legs about two or three inches above the knee and ankle joints, left on for six hours.

Internally—The following powders to be taken in effervescence every two hours, in order to render the secretions alkaline.

Potass. Bicarb. ʒiss.
Sodæ Carb. ʒss. } 1 powder.
Tartaric Acid ʒi.

Began to take these powders at 6 o'clock P.M., and after the third powder had been taken, the urine was found to be quite neutral.

February 21—At 11 A.M., the serum from the blisters was found to be distinctly alkaline. The saliva, however, was still distinctly acid. Pulse 90; Resp. tranquil. Pain has gone from left to right side. Complains also of a severe pain in the back when he raises himself up, but when lying quiet he does not feel it. It is an acute sharp pain, not a stitch. Powders to be given now only once every three hours.

22nd.—Urine quite alkaline. Seems much better. Pain chiefly in hips. Legs feel easier.

23rd.—Urine still quite alkaline. Pulse 72; skin cool; no profuse perspiration. Complains of very great tenderness in hips. Medicine was changed to half a powder every four hours. Locally hips painted with Tr. Iodine.

24th.—Pain chiefly in left side, less in left hip and in toes of left foot. Pulse 84. Still no cardiac complications. To-day medicine was changed. Add Tr. Cinchon. ʒi to each dose of previous medicine. Was removed to ward 16; 15 was kept too cold, and he was complaining of being very chilly. The poultices about the joints were discontinued to-day, and instead the joints were thickly cased in cotton wool and covered with oil-silk.

25th.—Pain now in the joints of arms, legs feel much better. Pulse 78; secretions alkaline. First signs of cardiac complications discovered to-day, a slight murmur heard at the base near the sternum. Emplastrum Lyttæ applied to the chest. Left on four hours and followed by poultices.

26th.—Great pain in neck and shoulder; heart murmur feebler than yesterday. Pulse 84. Constitutional symptoms very favourable, though local are not so much so.

27th.—Murmur very slight; still great pain in neck and shoulder, also in right leg. Treatment to be continued.

28th.—Great pain in left arm and right leg. Sleeps little if any at night. Murmur very slight. Pulse 84; skin moist. Ordered Pulv. Dov. grs. xv., at night.

29th.—Back very sore, pain returned to right knee. Pulse 90; Resp. a little hurried. Paint back and shoulders with Tr. Iodine Pulv. Dov. grs. x., to be repeated every four hours.

March 1st.—To-day for the first time a very profuse acid perspiration came on. No complications, arms very sore, got him a mattress, and renewed all his cotton batting and oil silk. Skin cool.

4th.—No change the last two days, profuse sweating continues without giving any relief to the patient. His treatment was changed to-day to Quin. Sulph. ʒi., Potass. Bicarb. ʒv., Spts. Chlorof ʒiii., Aq. ad. ℥vi., a tablespoonful every four hours. Pulv Dov. to be omitted except at night.

6th.—Under the large doses of quinine, he has not any fever, heat of skin, noises in ears, dimness of eyes, acts as an antipyretic and reduces the heart's action. Yesterday and to-day there was no murmur at the base whatever.

7th.—Medicine reduced to half dose, *i.e.*, to half a tablepoonful three times a day. Skin is cool, temperature is better, pulse good, and was laughing to-day when the doctor came into the ward.

10th.—Has been gradually improving, a soreness and stiffness about some of his joints yet. Painted his arms with Tr. Iodine.

April 3rd.—His joints have troubled him a little. Past rheumatic pains wandering from joint to joint. The affected joints were painted with Tr. Iodine as soon as they became painful. He was discharged quite cured, after having been sick for the traditional six weeks.

Case of Acute Rheumatism with Delirium, under the care of J. M. Drake, M.D., Professor Clinical Medicine, McGill University. Reported by T. G. Roddick, M.D., House Surgeon.

D. H., æt 33, carpenter, was admitted into the Montreal General Hospital, on the 15th March, 1869.

History—He came to this country owing to some pecuniary difficulties at home, which circumstance seemed to influence him considerably for the worse. Ever since his arrival here a little over a year ago, he has been accustomed to drink very freely, with the hope as he thought of drowning his cares. He would spend the greater part of every night in drinking, and has been known to get through a couple of bottles of whiskey at a sitting. It is not known whether he ever had Delirium Tremens, but he appeared to be often threatened with it. His temper was at times most violent, and he was constantly at variance with his companions. He would have occasional paroxysms of rage, and again would often cry at very trifling occurrences.

On admission, the joints chiefly affected were the knees and ankles, though he suffered the day previous from the elbows as well. The slightest pressure or weight over the diseased joints caused him to scream with pain. The heart was unaffected. He acknowledged to having been drinking pretty hard for some days previous to admission.

March 15th.—Perspiration very acid and profuse: pulse quickened to about 95; elbows, knees, and ankles chiefly, swollen and painful, though the wrists and shoulders were not free from pain. Ordered—

℞—Acid Nitromur dil. ʒvi.
Tinc Colombœ ℥i.
Aquæ ad ℥vi.
Sig—℥ss 4. q. h.

Also a Dover's powder at bed time, and the affected joints to be painted with Iodine, and covered with cotton wadding and oil silk. Given beef tea and corn starch.

19th—Very little change, is still quite helpless, secretions slightly less acid, but no marked improvement in any way. Pulse still high, bowels tend to be costive; Haust Niger; joints to be dressed as before.

20th—About the same; less pain in the elbows; hips and shoulders now attacked; perspires very profusely still, and complains of being very weak. Pulse however only about 90 and strong. The mixture to be discontinued and Potass Bicarb ʒij. every two hours substituted; also blisters ordered in the neighbourhood of the affected joints.

22nd—Has experienced great benefit from the change of treatment. The urine has become nearly neutral in reaction, and the secretion of the skin much less acid. Feels no pain whatever and merely a little stiffness in the joints.

23rd—He is not nearly so well to-day. The pain has returned in the shoulders, wrists and knees, but not so severely as before. Blisters ordered over each. His appetite is very good, and the thirst is great. His pulse has never yet been over 105, but it is now much weaker than ever before.

21th—Slept well last night, having had a Dover's powder, and feels very much better to-day. A very slight bruit with the first sound distinguishable this morning, and heard with greatest intensity at the apex. The secretions are alkaline. Pulse quiet and about 95; has little or no pain in the joints.

26th.—Nose bled a good deal during the night. Murmur a little more distinct. No pain in the joints, but merely a stiffness. Ordered Pulv. Dover gr. x. nocte.

27th—Was quite delirious the greater part of last night, and is now far from being himself. Pulse very weak and frequent; presents a very wild staring appearance, and in fact is delirious at times. The patients in the same ward assert that yesterday afternoon some friends gave him fully two-thirds of a tumbler of a liquid that looked very like brandy, and that immediately after taking it he became very restless, and made several futile attempts to sleep, but would be suddenly wakened by a nervous twitch which seemed to convulse the whole frame. That he got brandy is more than likely, as a large quantity had been detected in his possession a few days previous. The delirium last night was of the furious variety, as he struggled fiercely with the attendants, and could with difficulty be kept in bed. His manner has been very despondent all day, and he seems convinced that nothing can save his life. He cries at the most trifling things and cannot be consoled. Leeches ordered over each temple.

10 o'clock P.M.—A very sudden change for the worse came on

about an hour ago. He is now breathing very heavily and with slight stertor. Face and lips pale ; eyes half closed ; great restlessness and subsultus with floccitatio. Pulse very weak and frequent (140), heat of skin intense being as high as 108. Is quite unconscious and cannot be aroused. Is ordered brandy and beef tea ad libitum, with cold to the head. It is with great difficulty he can be made to swallow anything.

Died at 12.30.

Autopsy—Brain natural, pacchionian bodies enlarged and firmly adherent. Pineal gland in form of a cyst. Slight congestion of membranes with very trifling effusion under the arachnoid and occasional white points.

Kidneys—Slightly congested.

Spleen—Very much softened and indeed of a pulpy consistence.

Heart—Four to five ounces of effused fluid in the pericardium. A ring of fibrine round one curtain of the mitral valves.

Lungs and Liver perfectly healthy.

Proceedings of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held may, 4th, 1872.

The Society met at their rooms, the President Hector Peltier, Esq., M. D., Edin:, in the chair. After preliminary business, J. M. Drake, M. D., read the following interesting paper on a

Case of Erratic Erysipelas.

On Saturday, 13 April, I was requested to see a gentleman aged 42, a bookkeeper who had been ill for about a week previously. I was informed that for some time past he had felt depressed and run down from overwork, and from neglecting to take his meals regularly and at proper hours. Returning from his office on last Monday evening, he felt a smarting pain in the left hip, and on examining the part he noticed a red patch some two or three inches in diameter. The part was tender to the touch and appeared raised above the surrounding skin. Next day, (Tuesday) he was weak, chilly, and out of sorts, but nevertheless managed to walk to his place of business and back again, (fully two miles)—On reaching home the left hip felt so painful, that he was unable to sit down or even bear to have it touched. He went to bed and

had hot salt applied which gave some relief. About this time he began to complain of slight nausea, though he did not actually vomit: he also experienced headache and confusion of thought. To relieve the headache snow was applied with benefit. On Wednesday 10th, no change occurred except that he complained of a new pain in the left elbow. His wife stated that she looked at the elbow, but saw nothing wrong about it. On Thursday he seemed much better, took a good breakfast and wished to get up, but in the afternoon he became again feverish and excited. He had a warm bath and some hot drink, perspired freely, and next morning (Friday) said he felt much better and again wished to rise. On Friday afternoon he became very despondent, sent to the office for some one to whom he gave some business instructions and expressed his conviction that he would shortly die. This is the history of Mr. A's condition up to Saturday the 13th, the day on which I first saw him. The greater part of what I have just repeated was told by himself except that relating to his hip which singularly enough he did not refer to at all, till his wife mentioned it. Mr A appeared somewhat excited in his manner of speaking but quite rational. I remarked a very tremulous condition of the muscles of his face and particularly of the tongue, when protrnded, there was also a slight tendency to wander from his subject amounting to occasional incoherency which led me to make special enquiries as to his previous habits.—He had always been a most exemplary and sober man, and never suffered from severe illness of any kind. His wife stated that she had previously noticed, that his mind wandered occasionally and mentioned certain expressions he had used several days before, and one or two instances of failure of memory, which at the time of their occurrence did not specially attract attention, but were now recalled. The tongue was moist but with a little patchy coating of white fur. Pulse 100 full, soft and regular. Pupils natural and active. The head was not painful, but an uneasy feeling of distress was complained of as he expressed it " he felt bothered." On the left hip, extending from the great trochanter half way down the thigh, was seen a large dull red patch oval in shape, and perfectly circumscribed. The portion of skin involved in the redness was thickened, infiltrated and distinctly raised about the surrounding healthy skin. A short distance below the large patch described, were one or two smaller ones of exactly similar description but separated by tracts of healthy skin. The skin did not pit on pressure, the subcutaneous cellular tissue was not œdematous, and the part affected was so excessively tender, that even a slight touch elicited loud complaints. The general surface and conjun-

tivæ of the eyes appeared of a sallow hue, which I was told was not natural. He had no profuse sweating and no diarrhœa. The bowels had not acted, since Thursday last, *i e* three days ago, and then only after a dose of magnesia. Of course I examined the hip joint carefully and I was satisfied the pain complained of was quite superficial. On Sunday and Monday, my friend's condition continued much the same, except that he became rather more restless and his mental condition was rather worse especially during the night. I was satisfied, the nervous and mental disorder were consequences of the local disease, and as my patient was not an aged or unhealthy man—the extent of the disease not great, the pulse good and nourishment taken readily and in large amount, there did not appear to be much cause for alarm. I may mention, that on Sunday, his mind appeared to dwell on subjects of a religious nature—he expressed very desponding views of the state of his soul's health, but on the next day, Monday, though his mind still took a religious turn, everything, was bright and hopeful. His friends now became so uneasy, that I was very glad to avail myself of the valuable assistance of my friend Dr. Howard, with whom I saw the case on Tuesday. Mr. A. was now decidedly delirious. His delirium being of a rather quiet cheerful character. He answered question rationally enough when spoken to sharply, but when left to himself became fidgetty and restless—picking with his fingers and moving his hands about constantly and blowing or whistling—he was very impatient of any thing like constraint or interruption. In fact, the case looked a good deal like delirium tremens. Dr. Howard pointed out to me a soft swelling in the left elbow joint, which I may here say disappeared entirely in a day or two, and was not noticed in any other joint. The skin over the left hip was desquamating at the upper part, and the redness, fading above, appeared to be extending somewhat lower down the thigh. Dr. Howard confirmed my view of the case and taking into account the comparatively trivial nature of the local affection and the strength of the patient gave a tolerably favourable prognosis. On Wednesday 17th the 9th day since he first complained, and the 4th of my attendance. The pulse was 102. Morning temperature $102\frac{3}{4}$. He had not slept well for several nights, but last night not at all. The delirium continued and was assuming a more violent, indead a maniacal character, so as to make actual restraint occasionally necessary. His urine was frequently passed in bed. Sp. G. 1030, solidified when treated with an equal bulk of Nitric Acid contained no albumen nor sugar. The quantity could not be ascertained. On Wednesday night he slept a good deal, after a draught of Pot-Bromid, Valerian and Hyoscyamus: but before the draught was

given, he was highly excited and had a slight epileptiform seizure. On Thursday, 10th day, T. 99¼, Pulse 84, an eruption similar to the former, but smaller in extent now appeared in the middle of the lumbar region, and another patch over the right thigh in very much the same position as that occupied by the first patch on the left. The color of the parts first affected was nearly natural, and the skin desquamating. He vomited once about 5 o'clock this morning. The tongue was brown and somewhat dry. 11th day, Pulse 80, skin cool, appeared in a state of religious ecstasy and resolutely refused to take food. 12th day, Pulse 88, T. 99¾. On the afternoon of this day I saw him with Dr. G. W. Campbell in consultation, at the request of his friends. He now had all the appearance of a person suffering from acute mania. 13th day, condition not improved scarcely any sleep. A swelling was observed below. Poupart's ligament in the left groin distinctly fluctuating and dull on percussion, the skin not reddened, Pulse 120. I may relate in few words what followed: the maniacal symptoms continued till the 20th day, when he fell into a state of coma vigil, which lasted till next day, when death occurred. Only three symptoms during the interval are of sufficient importance to deserve notice. One was the appearance of a fresh eruption of a similar character to the others on the right flank about 6 in. x 4 in., the former patches fading and desquamating. A second symptom was the occurrence of hæmorrhage from the bowel which I first noticed on the 19th day, but which the nurse informed me had existed in smaller quantity, for some days previously. There was a rather profuse hœmorrhage a short time before death took place. A third symptom was the formation of an abscess in the left groin, which first appeared on the 13th day and which abscess I opened on the 19th day, evacuating about 2 oz. of sanious pus. The *treatment.*—Iron and Quinine. Chlorat and Bromid Potash with Valerian and Hyoscyamus at night, and subsequently when the maniacal symptoms became so marked Tr. Cana. Ind. Iodide and Bromid Potash, Beeftea ad lib. brandy, eggs and milk. Towards the close I was obliged to administer the food per rectum. The bowels were occasionally cleared by simple enema. Shortly before death the right pupil was observed to be rather more dilated than the left, and comparatively insensitive. Monday 29. He died this morning about 10. Port mortem at 4 P. M. *Rigor mortis* moderate. A considerable bloody discharge has taken place from the anus. The situation of the erythematous patches are marked by livid discoloration. *Abdomen* examined.—Small intestine particularly the ileum appears much injected. Mesenteric glands enlarged. On opening the ileum, its inner surface for about 2 feet above the

ileo-cecal valve, was found to be coated with dark tarry colored blood. The coats of the ileum to the same extent were intensely injected, and a number of the solitary glands were swollen and prominent. Peyer's glands appeared distinctly thickened and swollen. *Liver*—venous congestion, otherwise healthy, gall bladder healthy. Heart healthy in all respects, left side empty, right side contained a moderate amount of blood. *Lungs*—Right lung adherent by recent effusion to costal pleura; structure of lung highly congested but otherwise healthy. *Left lung*—Venous congestion otherwise healthy. Spleen small and friable. *Kidneys*—both smaller than natural, tough and granular, the capsules tearing off with great difficulty. *Brain*—Dura mater healthy, venous sinuses engorged and a considerable amount of subarachnoid œdema, arachnoid transparent not thickened, perfectly normal in appearance. Superficial cerebral veins full. Brain substance healthy throughout, both as to consistence and vascularity.

The interest of this case appears to me, chiefly rests; 1st—Upon erratic character of the eruption; 2nd—On the great, unusual and apparently disproportionate severity of the nervous symptoms, as contrasted with the local manifestations of disease; 3rd—The evidence afforded of how completely the blood may become vitiated and poisoned by, or concurrently with, a comparatively trifling eruption of an erysipelatous nature. In this case the skin only was involved, not the cellular tissue at all. The latter was not even œdematous and delirium manifested itself on the 9th day, while as yet, the surface attacked could not have been greater than 6 in. x 4. It is true, we must take into account the granular and atrophied state of the kidneys, a condition which was absolutely well marked and which, notwithstanding the only examination of the urine I was able to make gave no indication of the presence of albumen or of a deficiency of urea, must yet have contributed largely to vitiate the blood. Death appears to have resulted; 1st—From interference with due nutrition of the nervous system, inducing wakefulness, and continued and exhausting movements; 2nd—A low form of enteritis; 3rd—Œdema of the arachnoid; 4th—Pleurisy; 5th—Exhaustion from unwillingness to take food. The inflamation of the pleura (evidently recent) and the enteritis I regard as metastatic. The occurrence of ichorrhæmia with defective secretion from the kidneys, would undoubtedly explain both.

The following passage occurs in Mr. Campbell de Morgan's article on erysipelas in Holmes' surgery, p. 258, vol. I. "We not unfrequently, see cases in which the nervous excitement, and restless wakefulness are greatly in exces of the general symptoms

of erysipelas, and tend to exhaust the patient, and further that this has been often observed in connexion with erratic forms of erysipelas, and furthermore that this erratic tendency is usually an indication of organic disease of the secreting organs or of broken down constitutions.

Dr. Howard, had seen the case in consultation with Dr. Drake, and concurred in the opinion, that it was an example of erysipelas, presenting unusual symptoms. It had been regarded by an observer as a form of mania, but the pyrexia, the localized patches of cutaneous inflammation, and the post mortem appearances contradicted that view. It wanted also the typical range of temperature, the eruptive and the characteristic alterations in the intestines of typhoid fever. The pathology of erysipelas is an interesting subject, and presents some topics worthy of investigation. For instance, is the disease as met with in surgical practice, traumatic erysipelas, identical with that occurring in medical practice—the so called idiopathic erysipelas? The latter almost invariably declares itself on the face and thence tries to extend over the scalp where it usually stops. The former manifests itself in an injured part, the site of some wound or raw surface—and spreads continually, like erysipelas of the face it is true, but has less tendency than it to stop at a determinate site. Idiopathic erysipelas would thus appear to have as special "an affinity" for the face and scalp as scarlatina has for the skin and fauces, while the tranumatic variety affects any part of the external surface. While attending the General Hospital last winter, a man with frost-bitten hands, not yet cicatrized, occupied a ward in which a patient lay with erysipelas of the face. The disease exhibited itself in the frost-bitten man, not on the hands about the raw surfaces, but on the face. Why did the disease thus manifest its preference for the face rather than for the hands? Usually after operation and other local injuries, erysipelas seizes upon the injured part, it did not in this case. In the small pox Hospital, one of his patients was attacked with erysipelas of the face, why not on the hands or elsewhere? If his experience is not singular, it will have been observed he thinks that idiopathic erysipelas of the face is rarely, if ever communicated, and when it appears to be, it almost invariably shows itself on the face, and not elsewhere. These circumstances appear to Dr. Howard, to lend some probability to the idea that erysipelas of the face is a distinct febrile affection, not identical with that familiar in surgical practice as following operations and occurring in our crowded and otherwise unhealthy wards. During the winter just elapsed, there has been epidemic tendency, in this city to erysipelas and puerperal fever,

and many cases of phlebitis have occurred; can it be that there exists a correlation of morbific forces analogous to that which obtains amongst the physical forces—so that the same morbid force or influence in one develops eyrysipelas, in another pyæmia, in a third puerperal fever and in a fourth phlebitis. It seemed to him not improbable in the affections just mentioned, but less so in the case of the specific eruptive fevers, the poisons of which always appear to produce their like, measles reproducing measles and small pox, small pox.

MEETING HELD JULY 6TH, 1872.

The Society met in their rooms, the Vice-President, W. H. Hingston, M.D., in the chair. After preliminary business. Dr. Fenwick made the following remarks.

I had intended, Mr. President and Gentlemen, to bring before the Society this evening, a case of Fibro-Cystic Bronchocele which came under my charge recently, and in which I removed the entire half of the thyroid body. The patient is, however, still under observation, and as the case is incomplete, it is probably better to defer its description to a more fitting opportunity. I will however this evening substitute a case of Recurrent Fibroid Tumour, which presented itself at the Montreal General Hospital, and which was removed in March last. The tumour was of large size situated in the axilla, and extending from the outer border of the sternum to the posterior edge of the scapula, it reached upwards nearly to the under surface of the clavicle, and downwards to nearly on a level with the under edge of the left mamma. The mammary gland was perfectly unimplicated, the tumour itself although bound down beneath the great pectoral muscle, yet it was perfectly free, and could be moved about in all directions. It presented a nodular feel, was exceedingly firm and dense, and from pressure on the nerves in the vicinity was giving a great deal of pain, so much so that it was reacting on the patient's general health. She presented a pale, ex-sanguine careworn expression, and was desirous at all hazards to part with her troublesome companion. For the notes of this case taken prior to the operation I am indebted to Mr. J. C. Cameron, the present apothecary of our Hospital; these I subjoin:—

M. R., æt 25, admitted to Montreal General Hospital, February 26th, 1872, with an immense tumour situated under the axilla, and extending around below the inferior angle of the scapula.

Previous History—Is a married woman, has one child. Three

years ago she noticed a little hard lump under her arm, quite flat and causing no pain; she paid no attention to it whatever, this was in the winter time. The lump did not seem to grow much till April, 1869, when she weaned her baby, when it began to increase rapidly in size till June, when it remained nearly stationary for some time. It did not seem to change much till last summer, (1871,) when it began to grow very rapidly. At the end of August, she got a very bad cold, and an eruption came out all over her body, the skin peeled off, and the nails dropped off. While this peculiar irregularity was going on, the tumour got very much smaller and seemed to sink and shrivel up. But as soon as this severe cold and attack got better, the tumour began again to grow rapidly, and continued to do so till the time of entering hospital. She felt as if the tumour was getting so large that it was ready to burst out of the skin. She never experienced any pain in the tumour itself but when she walked or exerted herself, a pain seemed to dart through. The pain ran from the axilla to the elbow, this was only when she exercised however. When quiet she always kept a pillow under her arm, and was free from pain. The pain she described as sharp and darting, like a red hot iron passed quickly over her arm. The pain extended out through the shoulder and seemed to come out right under the shoulder-blade. She has not been healthy ever since this tumour began to grow, has gradually lost health and strength, got very weak, even after two months growing of the tumour, found that in attending to her ordinary household duties, as sweeping the floor, she had to sit down several times to rest. Towards the last it got so bad that she had no rest or quiet at all with it, not from any actual pain as long as she did not move, but from a feeling of suffocation and great dyspnœa. She was treated by several medical men. She came to the hospital to have it removed within a year from the time it first appeared, and the doctors decided to remove it, but her physician said that it would be as much as her life was worth to attempt such a thing, and that any doctor should be shot who advised such a step. This frightened her and she would not undergo the operation. This winter she consulted Dr. George Campbell, who advised its early removal. She cameinto the hospital fully prepared to submit to the operation, knowing what a great risk she incurred from the seriousness of the operation and the delicate state of her health.

For a report of the operation I am indebted to Dr. T. G. Roddick, our present House Surgeon; it is as follows:—

The patient having been seen by Dr. Fenwick at his own residence, he advised her to enter the hospital for the purpose of

having the tumour removed. A consultation of the medical staff of the hospital was convened, and it was decided to remove the tumour by operation. This was performed in the following manner on the 2nd March, 1872.

The patient was placed under the influence of chloroform, and Dr. Fenwick commenced his incision about the centre of the tumour, carrying it downwards and backwards toward the inferior angle of the scapula, having divided the skin and superficial fascia, the glossy capsule of the tumour was exposed; laying aside the knife, the operator proceeded with his fingers alone to enucleate the mass, which was rapidly done, and with scarcely any hæmorrhage. The original incision extended only through the skin, covering half the width of the tumour, but was found amply sufficient. After the tumour was removed, it was noticed that the subclavian vein was laid bare for about 2½ inches of its extent; two small vessels required ligature, the surface of the wound was cleansed thoroughly of all clots, and all oozing having ceased, the edges were brought together by five silver wire sutures. The line of incision was dressed with lint wet with carbolic acid lotion, a large compress was applied over the seat of the tumour, retained in position by a well applied roller, and the patient removed to bed. After the operation the patient was comparatively strong, but there remained for some hours an irritable condition of the stomach which was evidently due to the chloroform.

On the second day after the operation the wound was dressed, and everything was looking well, this state continued for the first week, the patient taking nourishment well, the pulse was firm and regular, and ranged between 70 and 80. The wound was discharging freely, necessitating frequent change of the dressings. The external wound had closed at its upper part, this prevented the free exit of pus which appeared to lodge beneath the pectoral muscles, and in consequence a drainage tube was inserted, and no further trouble in this respect ensued. On March 11th it was noticed that the patient did not look well, she complained of want of rest from a hacking cough throughout the night, and upon dressing the wound it was noticed to present an erysipelatous appearance, this extended down the arm, and on the third day appeared on the face. The muriated tincture of iron with small doses of Quinine were ordered, wine and beef tea, and locally a solution (warm) of Acet. Lead.

March 17th—Erysipelas disappearing, though the patient is very weak, pulse 115, wound almost healed, but the suppuration is still considerable. It was noticed that the hand and arm were very much swollen and œdmatous. The iron was omitted, but Quinine

in grain doses continued three times a day. The œdema of the hand and arm was evidently due to interrupted venous circulation, and a distinct hard nodule was felt in the region of the subclavian vein, immediately beneath the clavicle, this was looked upon as a thrombosis in the subclavian vein, most probably in the part of the vessel exposed during the operation.

From this time the patient gradually improved in general health, but about the middle of April it was noticed that there were several nodular enlargements situated in the region of the posterior triangle above the clavicle, and these increased steadily. She left the hospital on the 15th. Some two weeks subsequently the patient left for the country on a visit to her friends. At this time her general health had but slightly improved, and the swelling and œdema of the forearm and hand had increased. I subsequently learnt that my patient had died suddenly; of course being some distance from Montreal, there was no means of verifying my surmise by post-mortem examination, but I can alone account for the sudden death on the supposition that the venous clot had separated, and had been carried into the circulation, and thus produced the fatal result by blocking up in whole or in part, the pulmonary artery.

Reviews and Notices of Books.

Lectures on the Principles and Practice of Physic, delivered at King's College, London, by Sir Thomas Watson, Bart., M.D., F.R.S., Physician in Ordinary to the Queen; Hon. LL.D., Cambridge; Hon. D.C.L., Oxford, &c., &c.; in two volumes; from the fifth revised and enlarged English edition; edited with additions and numerous illustrations, by Henry Hartshorne, A.M., M.D., Professor of Hygiene in the University of Pennsylvania, &c.; vol. i, pp. 880; vol. ii, pp. 992; 8vo. Philadelphia: Henry C. Lea, 1872. Montreal: Dawson Bros., Great St. James street.

The lectures of Dr. Watson on "The Principles and Practice of Physic" first made their appearance in the pages of the *Medical Gazette.* This was about the year 1839 or 40, and subsequently, at the earnest request of many warm friends and old pupils, the author was induced to publish them in book form in the year 1843. It has run through five editions, the one before the present was issued in 1858, so that fourteen years have elapsed since the

learned author supervised the bringing out of a new edition of his great work.

When it was announced that Sir Thomas Watson was engaged in revising the last edition of his lectures, there were those of his friends and admirers who feared that he was unequal to the task, and that an imperfect performance of it would bedim his reputation as an eloquent and erudite teacher and expounder of the truths of the science of medicine.

The present edition has lost none of that wonderful power of fixing the attention and seizing upon the mind of the reader, so that it must be admitted that the pen of the venerable author has lost none of its master's spirit of truthfulness and accuracy, which has peculiarly marked the former editions of these lectures.

Throughout the work it is apparent that the author has noted the progress of physiological research. The functions of the minute arteries in regulating the supply of blood to the various tissues and organs is recognized, and this accepted physiological doctrine is employed to explain a variety of pathological changes; for instance, the author shows that in death by apnœa the pulmonary capillaries are empty; clearly, the blood must have been arrested before arriving at the capillaries, this arrest being due to the contraction of the muscular walls of the minute pulmonary arteries, influenced by the vaso-motor nerves.

"It had been ascertained by various trustworthy observers that if the thorax of an animal, which has been suddenly strangled by a tight ligature placed upon its windpipe, be examined immediately after death, the lungs are always found empty of blood, while there is vast engorgement of the right heart, of the great veins, and of the pulmonary artery up to its minutest ramifications. Dr. Johnson proved, by experiments of his own, that this is so, whether the ligature be applied after or before a full inspiration, whether, that is, the lungs were, at the time, full or comparatively empty of air. These are the plain and unquestionable facts of the case. They show that some opposing power must have been called into play, more than equal to the propelling power of the right ventricle of the heart. Now, such a power—and it is the only conceivable one—actually exists at the very place where the venous current meets with its curb; and it consists in the firm contraction of those muscular fibres of the minute arteries, the function of which it is to regulate the blood supply in accordance with the varying requirements of the part. This function again is determined by those unsleeping sentinels, the (vaso-motor) nerves. Were it allowable, for the sake of illustration, to impersonate the vital forces concerned in this marvellous

adaptation, we might liken the process to the intelligent stopping of the traffic on an obstructed line of railway by a backward telegram."

The reader can readily see how this recognized function of the minute arteries sheds a light on the pathological conditions met with in many cases of diseased action. It accounts for the empty state of the capillaries and the congestion of the vessels in that terrible disease cholera, and in acute laryngitis; the obstruction to the entrance of air, and the imperfect æration of the blood, leads to contraction of the minute pulmonary arteries, inasmuch as the pulmonary capillaries are incapable of ærating their accustomed quantity of blood. This is followed by congestion of the larger pulmonary vessels, the right cavities of the heart, and the systemic venous system. Other changes follow with such rapidity as to lessen the chances of surgical relief by the operation of tracheotomy, unless it is performed early. On this head the author observes:

"When you have good evidence that a mechanical obstruction to the passage of the air exists in the larynx, and that the tubes *beyond the larynx* are pervious and free, there are two things which I would urge upon you. First, I would most earnestly advise you *not to wait too long* before you propose or perform tracheotomy: and, secondly, never to omit performing it *merely* because it may appear to be then *too late*. If, in the acute and limited disease, an artificial opening be made while the patient's strength is yet entire, and before his whole system is poisoned with venous blood, or his lungs are overwhelmed with sanguine congestion and serous effusion, it will almost surely save his life. But if the sinking of the vital power have gone beyond a certain point, tracheotomy will not, in that case, rescue him. It is bad and foolish practice to wait, and try other methods, and postpone the operation as *a last resource*, when the circulation is evidently loaded with unarterialized blood, and the air-tubes and cells are filling up. In my own case I should choose to be operated on early; the moment that I found early bleeding was not *telling* upon the local distress, and that any shade of duskiness became perceptible in the skin; just as I should choose to be operated on at once for strangulated hernia, after one fair attempt had been made by a skilful hand to return the bowel; without waiting till inflammation set in, or had been *caused* by the taxis. On the other hand, if you do not see your patient until his powers are nearly exhausted, do not abstain from the operation, even though you may feel convinced that it will be unsuccessful; for if it do not save life, it will disarm death of its agony. A patient will some-

times lie for hours, painfully laboring for breath in deep and strong catches, at considerable intervals from each other; being, in fact, just in the condition of a man with a cord round his neck, not pulled quite tight enough to suffocate him at once. Besides, it is not always easy to say whether the period of possible recovery *is* yet gone by."

The chapter on cholera appears to have received considerable addition; in this, Sir Thomas adopts the theory of Dr. George Johnson, as to the nature and pathology of cholera, and also is favourably impressed with his practical deductions, it does not appear that he speaks authoratively, as though his views were the effect of conviction, the result of actual trial. Indeed he remarks:—"When I last spoke on this subject in these Lectures, I stated that the few recoveries which I had witnessed, had all taken place under large and repeated doses of calomel, but that I could not venture to affirm that the calomel cured them. At present I am much disposed to believe that, by its cleansing action, the calomel may have helped the recovery; and after all that I have since seen, heard, read, and thought upon the matter, I must confess that, in the the event of my having again to deal with the disorder, I should feel bound to adopt, in its generality, the evacuant theory and practice; and avoid alcoholic stimulants and opiates." Now on this head we must say, that however plausible may appear the theory of Dr. Johnson, his method of treatment by evacuants has been unfortunately unsuccessful in the hands of many able physicians, and according to Mr. Sedgwick, Dr. Johnson himself lost sixty-two per cent. of cases treated in King's College Hospital, during the epidemic of 1866. This statement has to be received with caution, as to judge dispassionately of the value of the evacuant method of treatment, each case would require to be carefully investigated.

It does seem plausible, and to our own mind reasonable, the removal of offending poisonous matter which is presumably the cause of the disease. And we have heard that during the early epidemics of 1831, 1832, and 1834, many cases of cholera were arrested in Italy and Spain, by the administration of large doses of freshly expressed olive oil. This was related to us as a fact some years ago by an old friend who resided in Spain during that period: this was before the epidemic of 1853-54, and it made so great an impression on our mind at the time, that we determined to try the oil on the first opportunity. We did so once, and once only, but our patient did not retain it long in his stomach, and absolutely refused to take a second dose, he recovered, but we were not favourably impressed with the experiment: nor did we

attribute his recovery from the attack, to the use of the olive oil. Sir Thomas gives the rules laid down by Dr. Johnson for the treatment of choleraic diarrhœa, using that gentleman's own words: these will repay perusal, as they not only refer to the eliminative method of treatment, but also directions are given for the general management of cases. This lecture is greatly enhanced by the American Editor who gives the views and opinions, chiefly as to treatment, of the leading American Physicians. These as may be expected differ somewhat from those of the author, as Dr. George Johnson's theory has not been favourably received by the profession in the United States

In referring to Bright's disease, mention is made of hypertrophy of the left ventricle of the heart, which is according to Dr. Bright so often met with in this affection, independent of valvular disease, or disease of the coats of the large arteries. Here again the same action of the muscular coat of the small arteries is described as the cause of this phenomenon, and to Dr. George Johnson is given the credit of having demonstrated the fact that in chronic Bright's disease "the muscular walls of the small arteries, not only of the kidneys, but also in most of all of the tissues of the body are greatly hypertrophied," * * * "and since the tonic contraction of the small arteries is known to oppose the passage of blood, the hypertrophy of the left ventricle is presumably due to the excessive resistance offered to the circulation, by the excessive contraction of the minute arteries."

In conclusion the author in his epilogue remarks that "working with many interruptions and the slowness of old age, there are a few things in the first of these volumes which would have been somewhat differently put, if they had not been already printed while I was preparing the second." These additions have been supplied by the American Editor, who has not only retained many able comments and additions of Dr. Condie, the American editor of the edition of 1858, but has in this edition added where deemed advisable many notes, chiefly referable to the different aspect of disease an this side of the Atlantic. In his preface Dr. Hratshorne states that "with reluctance it has been found necessary to differ from the author, in regard to his acceptance of the views of Dr. George Johnson," on the subject of cholera. Since the first appearance of these Lectures they have stood unrivalled for their clearness of definition, and the familar and lucid exposition of the Practice of Medicine. They have been with students the favourite text book, and we make no doubt that this present edition which is in no way inferior to those gone before, will fill the same place.

A Treatise on Diseases of the Bones. By Thomas M. Markoe, M.D., Professor of Surgery in the College of Physicians and Surgeons, Surgeon of the New York Hospital, Surgeon of Bellevue Hospital, Surgeon of the Roosevelt Hospital, Consulting Surgeon of the Mount Sinai Hospital, of the Strangers' Hospital, and of the Nursery and Child's Hospital, &c., &c. New York. D. Appleton & Co. 1872.

Of late years much attention has been bestowed upon the pathology and surgery of the bones, and our knowledge of these subjects has been very much advanced. The study of the morbid processes which take place in the complicated and marvellously-formed structures of a bone is peculiarly interesting, requiring as it does, special knowledge of the minute histology of the bony skeleton, as well as an appreciation of the peculiarities of the ways in which nature works in it for the purpose of counteracting disease when developed therein.

This book by Prof. Markoe, one of the ablest and deservedly most popular professors of New York, is a most welcome addition to the literature we possess in this branch of surgery. It is made up principally, as we are told in the preface, of the lectures which he has delivered during the last 12 years at the College of Physicians and Surgeons of New York city. It is divided into three parts, viz.: Diseases of Bone; Tumors of Bone; and Malignant Diseases of Bone. It does not claim to be a complete compendium of all that is known on the subjects of which it treats, for the author states that he has followed rather the leadings of his own studies and observations, dwelling most upon those branches where he has himself seen and studied most.

The range of experience of Prof. Markoe and his opportunities for observation, owing to his connection with several of the large metropolitan hospitals of his city, have been almost unsurpassed; and as in his own words, "the study of diseases of the bones has had for him a life-long interest," the amount of original observation and research contained in his book is very remarkable. Every chapter is replete with most instructive relations of actual cases illustrative of the subjects discussed, which have come under the care of himself or his confreres. By this means, the interest of the reader is sustained throughout, and the lessons taught are most agreeably impressed upon his mind.

The views of the author on matters of pathology and treatment are always clearly defined and logical, and generally carry with them conviction of their correctness. The style is simple, forcible and clear. The book is one which it is a pleasure to read, and contains the combined knowledge of an advanced pathologist, scientist and practical surgeon.

PERISCOPIC DEPARTMENT.

Surgery.

CASE OF IMPALEMENT ON A BRUSH-HANDLE, WITH PERFORATION OF THE DIAPHRAGM.

By Jonathan Hutchinson, F.R.C.S., Senior Surgeon to the London Hospital.

On the afternoon of Saturday, May 13th, 1871, I saw, in consultation with Dr. Brereton, of Old Ford, the subject of the following narrative:

Mrs. W., aged 27, had, on the morning of the same day, received a severe injury from a fall backwards on her own stairs. It was believed that she had put her foot on a bobbin which one of her children had left on one of the steps, and which caused her to fall suddenly and with great force backwards in a sitting posture. In her fall she felt something enter her body near the anus, and on recovering herself she found the lower part of the handle of an ordinary parlor hearth brush projecting close to the bowel. With great courage and resolution she extracted the whole of this without assistance, although she had, as she said, to change her hand twice on account of its length. Having extracted it she fell faint, and sat on the stair until her servant came and helped her up-stairs to bed. She did not faint away, and she told me afterwards that she had at the time no very severe pain, but only very considerable difficulty of breathing. Dr. Bereton saw her within half an hour of the occurrence. He found that her clothes had not been any way perforated by the brush-handle; there was a punctured wound close to her rectum, and no evidence of hæmorrhage going on. He estimated the quantity of blood which had been lost at about half a pint, for her clothes were in part saturated. The shaft of the broom was smeared with fæces almost up to the part where it had broken off, close to the broom-head. Thus it appeared certain that a length of at least sixteen inches had entered her body.

When I saw Mrs. W. in the afternoon, about eight hours after the accident, she was in bed, looking very pale, but not complaining of any great pain. She allowed me to examine her abdomen

pretty freely, and, although tender in parts, it was remarkably little so. I found her right chest quite tympanitic, and was obliged to infer that the diaphragam and lung had probably been wounded. Although perfectly conscious, and with a countenance but little expressive of anxiety, she had no pulse at the wrist. The laceration by which the broom had entered was on the left side of the bowel, and would admit two fingers. There was no bleeding whatever, and there did not appear to be much to be done in the way of treatment. Death took place in the following night, about twenty hours after the accident.

At the *post mortem* examination we found that the track taken had been first through the skin, and then into the rectum an inch or two above the anus, and thence through its anterior wall just behind the uterus, into the abdominal cavity, after traversing which the implement had passed through the gall-bladder and liver, through the diaphragm, and had entered the lung. The pleural cavity contained a considerable quantity of air with some blood and serous effusion. The peritoneum was everywhere greasy with recent lymph, and contained probably about a pint of clotted blood mixed with bile and small portions of fæcal matter.

I was puzzled at first to explain how it could have gained access to the body without damaging in the least the clothes. Dr. Brereton suggested, and probably correctly, that the brush was lying on the stairs with its handle pointing upwards, and that the woman's petticoats caught its tip and tilted it under them just before she sat down on it. As an illustration of a very unusual kind of accident, the case is of some interest. Nor is it wholly without medico-legal value as an instance of what it is possible for a fearfully wounded person to accomplish. This poor lady actually drew out of her body a weapon eighteen inches long, the point of which was in her lung, and which had to be extracted through her diaphragm, liver, gall-bladder, and the whole vertical length of the abdominal cavity. The amount of blood lost was much less than might have been expected, and the real cause of death appeared to be the shock of commencing peritonitis.—*British Medical Journal.*

A NOVEL TREATMENT OF HERNIA.

M. Demarquay has lately employed, with success, a novel method of treatment in a case of strangulated hernia which resisted the taxis, viz., the evacuation of the contents of the intestine. The patient was a young man, aged 22, who came under M. Demarquay's care with a greatly distended congenital

hernia. The taxis having been tried and proved unsuccessful, even with the aid of chloroform, M. Demarquay thrust a fine trocar into the centre of the swelling, and, by means of Potain's "aspirator," removed between four and five ounces of fluid, besides gas. After removing the trocar, and waiting a few minutes to see whether the intestines became refilled, he again carefully applied the taxis, and easily returned the intestines into the abdomen. Small doses of opium were afterwards given. No symptoms supervened, beyond orchitis, in consequence of the pressure to which the testicle had been subjected: the patient recovered perfectly, and was exhibited by M. Demarquay to the Academy of Medicine a fortnight after the operation. M. Demarquay proposes the emptying of the intestine in the manner described in the following classes of cases: 1st, in all congenital hernia, or in recent hernia which have become strangulated at the moment of their formation; 2nd, in old hernia that have been reducible up to a few days before strangulation, and in large umbilical hernia that have recently become strangulated. The operation must not be performed except at an early stage, before there is reason to believe that changes have taken place in the intestine, rendering it incapable of resuming its functions.—*British Med. Journal.*

Medicine.

ON THE TREATMENT OF SMALL-POX BY VACCINATION AND INJECTION OF LYMPH.

By Robert Grieve, M.D., Hampstead Hospital.

Mr. Furley, in the *Journal* of the 8th instant, while describing some instances of small-pox treated by vaccination and the injection of lymph, takes occasion to criticise the cases published in the *Journal*, in which vaccination in small-pox was tried at the Hampstead Hospital. There are points in his paper upon which I wish to make a few remarks. He differs from the opinion of Mr. Marson, and also that held by me, that the influence of vaccinia over variola when concurrent is *nil*, unless the former have been induced within the first five days of the period of incubation of the latter. I may state that my belief on this point is formed after observation of a very considerable number of cases of these diseases when co-existent. I have a difficulty in reconciling Mr. Furley's language on this point with what he has stated in another journal, where he says that he has found vaccination in small-pox in adults "almost inoperative." It is well known to all accus-

tomed to the treatment of small-pox, that vaccinated children very rarely, almost never, have that disease severely. Will Mr. Furley inform us upon how many unvaccinated children he has tried the cure by vaccination, and with what results? Mr. Furley asks: "Is it Dr. Grieve's experience for one-third of his cases to abort?" In vaccinated subjects it is my experience that three out of four abort—that is to say, run a highly modified course, and that this proportion is even much larger amongst those who have four or more good cicatrices of vaccination, as it is less in those imperfectly protected. In unvaccinated subjects, the disease very rarely indeed aborts; but of the six here, five were vaccinated, so that under ordinary circumstances three ought to have aborted. Although this has been my experience of small-pox, I do not agree with Mr. Furley that necessarily it is a peculiarly happy one, for I think it will be found to be the experience of many others. I may remind Mr. Furley that three out of six died, our general mortality is not fifty per cent., and, as he says, there are no cases without a lesson; what lesson does he draw from this? He falls into an evident error as to the period of the disease at which vaccination was tried; he says they were not vaccinated until the fifth and sixth days, evidently thinking it was at that stage of the eruption; while it was the second and third days of the eruption, or the fifth and sixth days of the disease. I saw nothing in the progress of these cases to cause me to alter the opinion that vaccination after the appearance of the small-pox rash is utterly useless. In order to give a full trial to the treatment, seven more cases were operated upon by the latest of Mr. Furley's methods—namely, the hypodermic injection of lymph in quantity. I take the opportunity of expressing the belief formed upon the results in these cases, that not only is its curative action absolutely nothing, but that in a certain number of instances most serious consequences have resulted from its use. Two only of those cases are as yet completed, both by death. One was from *variola hæmorrhagica* uninfluenced by the operation; the other had severe small-pox with bronchitis in the earlier stages; afterwards, erysipelatous inflammation of the arm operated upon set in, resulting in suppuration and sloughing of the cellular tissue. Diarrhœa came on, and convulsions shortly before his death. Another man has also had severe inflammation and suppuration of the arm, with serious constitutional symptoms; and in three others, abscesses either have formed or are forming in various parts of the body. These results are not such as to encourage me to continue the practice, but rather have determined me to discourage it by all means in my power.

I refrain from criticising Mr. Furley's cases, but I ask him to publish, not as he has done, a selected cure or two, but the history of every patient treated by him, with full particulars of their ages and condition as to primary vaccination. In the absence of such details it is impossible to form any reliable opinion as to the success or non-success of his plan of treatment. I am afraid this is but another instance in which a lucky succession of cases of variola curta has led to the belief that at last has been found the long looked for specific for small-pox.—*British Medical Journal.*

THE TREATMENT OF INERTIA OF THE UTERUS.

By Lawson Tait, F.R.C.S.Ed. & Eng., Surgeon to the Birmingham Lying-in Charity and to the Hospital for Women.

A sentence in Dr. Playfair's introductory lecture leads me to believe that a note on a very simple method of assisting labours which are tedious in the second stage, that I have recently adopted, may not be unacceptable. The method is far too simple for any expectations of mine to be fulfilled that I have been the first to use it, though I am perfectly certain that it is original in my own practice. As it was, however, actually based on Dr. Braxton Hick's method of external version, and suggested itself to me when I was performing that operation in a case of placental presentation, it may possibly prove to be, like Dr. Hicks's device, from its very simplicity, something new in obstetrics.

Dr. Playfair writes: "We have learnt, also, some valuable lessons from a careful examination of the abdomen externally, such as the possibility of aiding the force of feeble and ineffective pains by judiciously applied pressure to the uterus. In this plan, indeed, which is as yet little known in this country, I feel convinced we have a means of assisting the progress of a labour in which the delay is simply due to the want of sufficient uterine contraction, far safer both to the mother and the child, and far more effective than the administration of oxytoxic drugs, such as the ergot of rye, in which many place much confidence."

The fact that this is the only reference I have yet seen to the employment ef external pressure in cases of inertia of the uterus, must be my apology for describing the method in which I employ it, and, first of all, the case in which it was suggested to me.

In August last, I was summoned hurriedly one morning to see a woman in labour and attended by a midwife. I found her cold, pulseless, and the bed and floor swimming with blood. It scarce needed an examination to know that the placenta was presenting. The os readily admitting my hand, and the uterus being perfectly

flaccid, I at once removed the placenta, and, by the combined version, easily brought down both feet. I could get no amount of manipulation to induce contraction of the uterus; and to wait for the action of ergot was to waste time. I therefore passed my left arm under the patient aud my right arm over her, embraced the uterus between them in a direction parallel with the axis of the brim, interlocking my fingers and spreading them over as large a part of the fundus as possible. In this position, and by the external pressure, I imitated normal contractions, as one does with the forceps, and soon had the satisfaction of finding the child protruded as far as the shoulders; then, with the left hand on the fundus, and the right guiding the child, birth was soon completed. The child was almost dead, of course; but the mother made a good recovery.

Since this case, I have had on three occasions to adopt the method of external pressure in cases of inertia.

Mrs. K., confined on December 20th of her seventh child, had a large roomy pelvis; but though the passages were relaxed to the fullest and ergot administered twice, the uterus was absolutely passive. I placed her at once under chloroform, and commenced the intermittent pressure described above. In about ten minutes delivery was completed, and there was no *post partum* hæmorrhage.

In September, I was retained to attend Mrs. E., the mother of seven children. Her attendant informed me that nearly all her labours had to be assisted by the forceps on account of an inert state of the uterus, and that in the last two she had nearly lost her life from *post partum* hæmorrhage. A few days before her confinement, the house was entered during the night by burglars, and she awoke to see one of them removing her husband's watch from the toilet-table. She was, of course, much excited, and in the morning I was asked to see her. We feared very much that the fright would exercise an unfortunate influence, and so, indeed, it proved, for symptoms of labour came on immediately. We tried by opium and rest to delay it, and succeeded for a time. At last, however, it came on, and, as before, the second stage was characterised by inertia. The pains were sufficiently severe to require anæsthesia, but whether it was continued or not, they did nothing. Instead of resorting to the forceps, as I originally intended, I employed the external pressure, and very soon had the head on the perinæum. I then used the forceps to guide the head through the passages, still having the external pressure kept up. She recovered more rapidly and more completely than she had ever done, according to her own account, though she attributed it

to the chloroform. It is certain that she had no after-hæmorrhage.

The third case was in the person of a strongly built woman, in whose second labour the pains suddenly ceased without apparent cause. The head was nearly on the perinæum when I arrived to assist the midwife. I advised the external pressure instead of ergot, and we found it perfectly successful in re-establishing the pains, and by its help labour was completed.

I feel convinced from even this short experience, like Dr. Playfair, that the method of external pressure will soon and in most cases supersede all uterine stimulants, and that the use of these will now be confined to the *post partum* state. External pressure is of great help when, from accident or necessity, anæthesia has been pushed so as to interfere with the intensity of uterine action. I have little doubt that this communication will bring many others from obstetricians who have practised the same or some similar method of external pressure. My plea is that, so far as I know, it is not used in this country as it ought to be, and that ergot is far too largely consumed by parturient women, especially when under the care of the so called "trained midwives."

[Since correcting the proof of this note, I have seen a reference to a method of assisting the inert uterus by external pressure in Dr. Meadows' *Manual*, with allusion to the writings of Ritzen, Kristeller, and Playfair, but I have as yet had no opportunity of going further into the history of this method of treatment. It would seem to be not of older date than 1856.]—*British Medical Journal.*

A CASE OF PARAPLEGIA LASTING FIVE YEARS; ELECTRICAL ANÆSTHESIA.

QUESTION OF MALINGERING.

By W. Moxon, M.D., Assistant Physician to Guy's Hospital.

A lad aged 18, was admitted into Guy's Hospital (Astley Cooper ward,) under my care. He had been sent up from Northampton with the following history: He had fallen from a hay-loft nearly six years before admission, and in consequence of the fall was laid up with weakness of his lower extremities and of his back: he said that his water had been drawn off on account of his inability to pass it. The history which the lad gave was tolerably consistent. He said he had fallen from a height upon his back, and

that paralysis of the bladder and lower extremities was the result of the fall, all of which was very likely.

Whenever a paralytic case comes under care, one gets an advantage by inducing the person to put out all the effort he possibly can, urging and compelling him to do so. In this way one learns much of the nature of the case by the degree of willingness with which effort is put out, the freedom of the effort in the parts actually moved, as well as, of course, by the kind and degree of the imperfection in the usefulness of the paralysed part.

On making the boy get out of bed, he flopped on the floor, propping himself on his arms and resting on the side of his buttock, with his legs flexed at all the joints so as to be drawn up rather tightly. The legs were remarkably blue and cold, especially below the knees. The suspicious points about the lad's case were —first, the total paralysis he claimed to have; and, second, the defined line around his knees at and below which he declared the sensation to be lost. Under chloroform it was found that his legs, which he said it hurt him to straighten, would stretch to their length quite naturally: and when cautioned to be very careful, at the same time that he was forced to get upright—being held up in the air, in fact, by the arms,—his legs made very promising movements.

Testing the exact line limiting his anæsthesia in the way we employed led to still more doubt. We marked the professed line with ink, then made him shut his eyes, and tried his sensibility to touch above and below it. With his eyes shut he could not keep to his line as he had done most accurately when he was looking at it. It was remarkable, though, how near he kept to it.

The most interesting results were obtained from the electrical excitation of the paralysed parts. The lad was a miserable coward, and got into insufferable terror at the approach of the electrical battery. We did not calm his fears, but gave substance to them by applying the interrupted current so strong that I could scarcely bear it myself, which I endeavoured to do for the sake of appearances. He fairly bellowed when the poles were applied to his arm, the stimulated muscles of which contracted very actively, but I was much surprised to find that when this strong current was applied to his legs below the knees, he gave not the slightest sign of feeling in it, and said that he scarce felt it at all, while the muscles contracted so feebly that their reaction was often doubtful, and never more than very trifling. The same current applied in the same way to the legs of a man in the next bed, a courageous fellow who willingly underwent the experiment, made him hiss

inwards through his teeth, and no effort of will on his part could prevent the muscles from strongly contracting, though he made a very energetic face in the endeavour to resist contraction, whereas the boy's countenance was perfectly placid while the electricity was applied to his legs. The boy had been a fortnight in the hospital before I made this examination by electricity, and had already made considerable progress; first he had stood up holding on to the back of a chair, then pushed the chair before him, and at last lifted the heavy chair, supporting it instead of having it to support him. As all this mending had occurred in a fortnight, and especially as I could not but think that the power required to lift a heavy chair, in the awkward stooping posture the boy always assumed, was far greater than compatible with his claim to be paralysed, I had come to regard him as a shammer. These results of electrical examination, however, made me at the time doubt whether it could be all sham, and led me to expect that perhaps a check in the progress of the case might be anticipated. I therefore adopted a more active treatment than that hitherto used, which had consisted of camphor-water and driving behind the chair. The fresh means consisted in the use of silver, administered, not internally, but in the form of sixpences, and accompanied with promises of more. Under all these therapeutical means his progress was wonderful. He left go the chair back and got about on a broom-handle, then learnt to carry the broom. Five weeks after Christmas he ran a very good race with another boy in the hospital-park and won the shilling. He is now apprenticed to a tailor in the city of London, and described by his friends as doing well.

This issue of the case I suppose will be taken to show the boy's condition throughout was no other than deliberate deception. I can't help holding that opinion. Under these circumstances the state described in regard of electricity becomes of great interest.

Can we suppose that the prolonged disuse of the limbs had so brought down the sensitiveness of his legs and weakened their muscles that the usual painful contraction was partly not set up and partly not felt. It is difficult to suppose this, seeing that the power of the will found its ways into his legs so soon and thoroughly as the story shows. Nevertheless, I cannot suggest any more likely explanation of the difficulty, and we must remember that although recovery was quick it was gradual. I should, however, have said that in the latter few weeks the electrical current was used to the boy's legs; but the recovery was by that time complete. I ordered the electricity only for its moral effect; yet some may be disposed to think that that helped the cure.

But as my belief is that the lad was malingering, I think the chief interest of his case lies in its showing that want of absence of reaction to the electrical current does not prove a paralysis to be real; while the whole history shows the power over such cases which one may exercise by firm and persevering pressure upon the patient's will, keeping up a sufficient friendliness in the meantime.—*The Lancet.*

NOTES OF A FATAL CASE OF HYSTERIA.*

By Robert W. Foss, M.D., Stockton-on-Tees.

About 3 o'clock in the afternoon of October 11th, 1870, as I was passing his house, I was called in by B. to see his daughter, aged 19, who, he informed me, had been in convulsions all day. When I saw her she was perfectly conscious, throwing her arms and legs about, laughing and crying alternately, in fact, having hysterical convulsions. She complained of pain in the right side of her head, also of the *globus hystericus* rising up from her abdomen to her right chest, where it stopped. Her chest was normal both to percussion and auscultation. Pulse about 80, small. She also stated that she had had leucorrhœa, with much offensive discharge, for the last fourteen months, and since that time had had these hysterical attacks. She had been under medical care all this time, and was for some months a patient in an infirmary. Her father stated to me that all the medical men who had seen her said that she was simply suffering from hysteria with leucorrhœa, and that in time would be well again. I expressed a similar opinion, believing that it was a case more for moral than medical treatment. Within three hours of this she was dead, having expired in one of these paroxysms. Her father was anxious that the real cause of his daughter's death should be discovered, therefore Mr. A. H. F. Trotter and myself, assisted by Mr. Ruck, next day made a post-mortem examination of her body.

The right lung was normal, as was also the left, with the exception of some slight hypostatic congestion at the base. There was some frothy mucus in the bronchial tubes. There were no pleuritic adhesions. The heart was pale in colour, and rather flabby. There was a small clot of blood at the apex of the right ventricle; the other cavities were empty. The liver, which seemed rather larger than usual, on section, was normal, as were also the kidneys and suprarenal capsules. The contents of the cranium appeared perfectly natural. The base of the uterus was congested, and its

* Read at the Annual Meeting of the Northern Branch.

walls were thicker than usual. The mucous membrane lining the interior was covered with a thick glassy mucus like white of egg, which was also exuding from the os. The left ovary was about the usual size, and, on section, was found to present a honeycombed appearance, consisting of numerous little cavities filled with gelatinous matter, constituting what is called colloid tumour of the ovary. The right ovary was of the size of a large walnut, and, on section, consisted of one large parent cyst containing many smaller ones springing from its internal surface. There is nothing here to account for death taking place so suddenly as it happened in this case; and the only hypothesis we can offer is, looking at the state of the cavities of the heart, that it was death from syncope.

I would not have ventured to bring this case under your notice, had I not remembered a similar one in the clinical wards of the Royal Infirmary, Edinburgh, which was under the care of Dr. Douglas Maclagan, during the summer session of 1868, the subject of which was a strong well-developed woman between twenty and thirty years of age, who was admitted for hysteria, and who died suddenly in one of the paroxysms. At the post-mortem examination of the body subsequently made, every organ was found to be perfectly healthy, and the cause of her death, I presume, must therefore have been syncope. Whatever may be the pathology of hysteria, most medical men regard it as a disease curable, and not one in which an unfavourable termination is to be expected; therefore, besides any other value which this case may have, it teaches one thing, that death may take place during the hysterical paroxysms, and that when they exist there must be a certain amount of danger to life.—*British Medical Journal.*

EPILEPSY PROVOKED BY CONTUSION OF THE SCIATIC NERVE: CURE BY INCISION.

Dr. Garnier (*Union Médicale*) mentions that Brown-Séquard, in 1869, divided the sciatic nerve and the spinal cord in guinea-pigs, and that the simple irritation of the face or neck of the injured side could produce convulsions. M. Briand, 1869, showed that a wound of the hand will produce the same effects. It might be said that these were simple coincidences, and that onanism or venereal excesses had produced the epilepsy; but Dr. Billroth, of Vienna, relates another similar case, which is instructive. A young man at Pesth was struck on his left buttock by falling as he descended a flight of stairs. There was a soft tumour, the size of an egg, seated between the sacrum and ischiatic tuberosity. A

crack in the pelvis was diagnosed with contusion of the sciatic nerve. There was anæsthesia of the anterior of the thigh, and hyperæsthesia of the posterior part of the same; and muscular convulsions of the whole limb resulted, in spite of using leeches to the sacrum and blisters along the nerve. These convulsions extended throughout the whole body, in the form of diurnal or nocturnal attacks, and on the 24th of April a true epileptic attack took place in the evening. These then were repeated, although various medicaments were tried. Billroth found the leg bent on the thigh and the thigh on the pelvis. The foot could not touch the ground. A gentle pressure in the sciatic region seemed to reveal a swelling at the great tuberosity of the ischium, but whilst the sciatic nerve was being more minutely examined the patient was seized with convulsions and a regular epileptic seizure. The use of bromide of potassium was tried, but after six weeks of waiting the patient demanded to have an operation tried, and it was done on 26th June, 1869. An incision, eight inches long, was made along the sciatic nerve between the sciatic nerve and trochanter, which laid the nerve bare from the point where it leaves the pelvis up to the inferior sacral foramen. But the nerve was found to be quite normal in appearance. The patient had an attack of epilepsy on recovering from the chloroform sleep. The attacks were renewed at each dressing of the wound, but ceased in a year after the first accident. Dr. Garnier observes truly that if German surgery had only such audacious attempts to chronicle, it would be as well to leave it the monopoly of them. Would not cautery and moxas have been quite as useful without the danger that might arise from such "heroism?"—*The Doctor.*

MANIACAL ATTACKS IN THE BEGINNING OF TYPHOID FEVER.

The Editors of the *All. Wien, M. Zeit.*, 29th May, in speaking of the clinical cases of typhoid fever noticed in the wards of Skoda and Oppolzer, mention that the commencing symptoms of typhoid fever are so variable as often to cause the greatest difficulty in the diagnosis of this disease. Sometimes at the commencement there is no febrile reaction noticeable, but merely disturbances in the functions of the brain, so that the fever may greatly simulate an affection of the intellect. Such patients become quite confused in their capacity of thinking, speak suddenly and absurdly, become melancholy, and lose their memory, or have an attack of mania, with perhaps epileptiform seizures, when up to the moment of the disease coming on nothing remarkable was noticed, and the ap-

petite was present. In such cases we may very easily fall into the error of supposing that a disease of the brain is present. Such cases are by no means very rarely seen; and not a year passes at Vienna Hospital that some mistake of the kind is not made. It is only later on that the fever becomes revealed by heat, diarrhœa, and enlargement of the spleen with meteorism of the abdomen. We must suspend our judgment, then, in a case of mania when the patient has been perfectly healthy up to the time of the attack; and we may cherish the hope that the case may turn out to be one of typhoid fever.

In some cases of typhoid fever, too, the disease may simulate meningitis or encephalitis; but we must remember that in disease of the meninges, or brain, there is not solely disturbance of the activity of the intellect, but as a rule disturbance in the sensation and motion of the face and organs of special sense. In meningitis there are remarked disturbances in the functions of the brain, sometimes with the character of irritation and sometimes with depression or complete palsy; headache here attains, in acute cases a high intensity, and the patients complain of this not only when conscious, but put the hand to the head when unconscious. In meningitis there exists sensitiveness to scents, photophobia, and grinding of the teeth, and occasionally strabismus.—*The Doctor.*

TUBERCULOSIS AND PYÆMIA.

In reference to the discussion on pyæmia at the Pathological Society, reported in our last, when Dr. Sanderson stated his belief that there was a close analogy between pyæmia and tuberculosis, but that the former was an acute affair, and the latter one more gradually produced, Dr. George Moore writes to the *Lancet* to say that three years ago Waldenburg, of Berlin, published a masterly work entitled, "Die Tuberculose, die Lungenschwindsucht und Scrofulose," in which (page 455) his views are expressed in words which admit of the following translation: "Miliary tuberculosis is a resorption disease: it arises from the taking up into the circulation of very finely divided corpuscular elements, and from the deposit of the same as formations of nodules in numerous scattered parts of various organs. Accordingly, tuberculosis is a general disease, and also a blood disease in a certain sense, but it is not a specific one. Of all diseases in the nosological system, it stands perhaps the nearest to pyæmia, which is likewise viewed as a non-specific resorption disease. Pyæmia also forms separate deposits in various organs; but they are larger than in tuberculosis, and of a purulent, inflammatory nature. In pyæmia the elements which get into the blood are more extensive, and therefore cause embolism, stasis, large abscesses, and gangrene; in addition, the absorbed particles have a putrid or infectious character, and so excite severe irritation. On the other hand, in tuberculosis the particles are very small and finely distributed, and appear not to be endowed with considerable irritating properties; for this reason they do not occasion well-marked or at least extensive inflammations, but only give rise to the formation of small miliary deposits."—*The Doctor.*

CANADA

Medical and Surgical Journal.

MONTREAL, AUGUST, 1872.

THE CANADIAN MEDICAL ASSOCIATION.

It will be seen by reference to our advertising columns that the Annual Meeting of the Canadian Medical Association, will take place in Montreal, on Wednesday, the 11th September next.

This is expected to be the most important meeting that the Association has ever held, inasmuch as it is hoped that a Medical Bill for the Dominion of Canada will be definitely adopted, embodying the principle of a central examining board.

We have on a former occasion drawn attention to this measure, and the great desire on the part of what we believe to be the majority of the profession throughout the Dominion for its adoption. In saying this, we are aware that there may be some objectionable features in the Bill already submitted, but it is very necessary, to attain our object, that united and preconcerted action should exist in our ranks. To effect this the profession should hold preliminary meetings, and appoint delegates with full powers to enunciate their views, and endeavour not by wordy argument or factious opposition, but by calm and temperate enunciation of those views to settle on some definite system of Medical Legislation. For this purpose it would be well to establish without delay branch associations, so that men could attend the meeting with some definite plan of action.

In the June No. of *L'Union Medicale du Canada*, the editor, Dr. Rottot, who is conservative in the most tortured meaning of the term, gives a review of the projected Bill. He is of opinion that in a country like ours, where there are different nationalities, each one jealous of preserving his language, his laws, and his religious belief, it will be difficult to frame a Bill that would be acceptable to all. Now this is a difficulty that is easily got over, if both parties are willing to calmly and dispassionately consider the subject. Religion should have nothing to do in the matter, as medical students are not generally

examined on the peculiarity of their religious belief, and we should suppose that colic is as painful whether a man be a Roman Catholic, or a Protestant, a Greek, or a Hebrew, and that the treatment would differ but slightly. This is a fallacious mode of argument, for what has the nationality, the religion, or the laws of a country to do with the science of disease and its prevention or cure. We have often regretted the narrow mindedness of those who carry the country from whence their forefathers emigrated it may be centuries ago, into every day life. Canadians (for we are all that now) ashamed of the land that gave us birth, must needs call ourselves English, Irish, Scotch or Frenchmen—but ignore in toto our native land.

Can anything be so supremely silly, it may be well for political tricksters and office seekers, to raise such a cry, it may do well for an election contest, as we all know what a small matter will lead the rabble, but for serious thinking intellectual members of a scientific profession, whose mission is almost as sacred as that of the priesthood, it is unaccountably ridiculous.

We regret that the whole tone of this article is to say the least of it narrow minded. In speaking of preliminary education, the editor cites the XXVth Clause of the Bill submitted, which provides for the recognition of a Degree in Arts from any University in Her Majesty's dominions, and that persons holding such degree in arts, shall be permitted to commence the study of medicine without having to submit to preliminary examination, and he says :—

" De sorte qu'un gradué quelconque, fut-il d'Afrique ou de la " Chine sera admis à l'étude de la médecine, simplement sur pré- " sentation de son diplôme, tandis que nos jeunes compatriotes, " après avoir reçu dans nos colléges une éducation, pour dire le " moins, aussi bonne que celle donnée dans les Universités " anglaises seront obligés de se soumettre à un examen avant " d'être admis à l'étude de la médecine. Ces Messieurs " paraissent vraiment avoir une petite opinion de nos maisons " d'éducation."

To this we simply remark, that students be they of French or English extraction are dealt with alike. If a young man presents himself for preliminary examination, and holds a degree in arts from Laval University, he would be at once admitted to the study of medicine, without further test; if, however, he comes with a certificate hailing from any of our public schools, not in verity a university degree in arts, he would be expected to submit to the required test by examination. Where is the hardship, or where is the injustice done to "*Nos maisons d'éducation.*"

By the 28th Clause the Council are empowered to refuse recognition to any school of medicine not in actual operation at the time of the passing of this act. This is by all parties looked upon as an excellent measure, and when we see the condition of medicine in those countries where the multiplication of schools has been the rule, how debased and miserable a trade it has become, trading in the very lives of their fellow men is the occupation of a large number of practitioners, it behoves us in Canada to take warning, and to prevent such a result if it be possible. Here again *notre nationalité* is at stake, and the editor of the *L'Union Medicale du Canada* observes:—

"Ce qui veut dire, si je comprends bien, que si, plus tard, dans "la Province de Québec on croyait nécessaire d'établir une nou- "velle école de médecine canadienne, il nous faudrait avoir recours "au bon plaisir du conseil général."

Here we will stay our pen, we have selected these portions of the argument of our confrere, to illustrate the fear of utter annihilation which has fallen upon him. Those Englishmen are evidently, in his opinion, not to be trusted. They are plotting his destruction, the destruction not alone of his language, but of his institutions and of his religion. Without hope of salvation themselves, they are bent on carrying him and his compatriots and all their surroundings to perdition.

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But as regards the Bill, we would earnestly advise our brethren east and west, to hold meetings, elect delegates, discuss the various clauses, and what occurs to any one to be cumbrous, or that would be improved by alteration let it be amended. We solicit, we ask for advice, but we do hope that at this meeting a definite policy will be adopted, as it is very desirable that the profession throughout the country should hold legal status, and be protected against charlatanism and quackery.

A CONJOINT EXAMINING BOARD.

By a recent exchange, we notice that the Irish Licensing Authorities have agreed to a Conjoint Examining Board. This much wished for measure has been arrived at after careful deliberation, by delegates from the several licensing bodies, who have been in Session at the College of Physicians for several weeks. The only Medical Authority which declined to co-operate is the Queen's University of Dublin. In Scotland the same movement is on foot, although it is feared that the proposals of the Scotch

Colleges will not be adopted by the Medical Council nor by the Government. It is however believed, that should the measure proposed come before the House of Commons, or pass into the hands of the Government, that the action of the principal licensing bodies in England and Ireland to carry out an honest measure of reform, will meet with approval, and ultimately become law.

THE LATE PROFESSOR FRASER, M.D.

With feelings of profound regret we chronicle the death of our late friend and colleague William Fraser, M.D., Professor of Institutes of Medicine McGill University. This sad event took place at his residence on the morning of Wednesday, the 24th of July, after a short but painful illness, and we cannot but feel that the University has lost a valued and learned teacher, and the profession a wise and judicious counsellor. Indeed when we look back at the career of the deceased, we must confess that he set an example of strict probity—industrious to a fault, he laboured on through failing health, always ready at the call of duty, and when the summons came, ready to yield up his soul to his God.

Wm. Fraser studied medicine in the city of Glasgow, Scotland, from whence he received the Licence of the Faculty of Physicians and Surgeons, about the year 1834, he subsequently emigrated to Canada, and determined to settle in Montreal. A vacancy occurring in the Montreal General Hospital, he received the appointment of Apothecary to that institution in August, 1834. At this early date the funds of the hospital being inadequate, the sole appointment made was that of apothecary, who performed the duties of House Surgeon. Although he had assumed those duties, he still pursued his studies, and graduated at McGill College, after an attendance of two Sessions, in 1836.

Shortly after graduating he entered private practice in this city. In 1845 the staff of Lecturers at McGill College was augmented, and Dr. Fraser was selected to fill the chair of Medical Jurisprudence. In 1847, a vacancy having occurred in the attending staff of the Montreal General Hospital, Dr. Fraser received the appointment. Again we notice a change which occurred in 1849. The chair of Institutes of Medicine became vacant that year, and Dr. Fraser was selected to fill the position. Since that date he has continued his connexion with the University, and has filled the chair with great ability.

Two years ago some of the members of the profession in Mont-

real resuscitated the Medico-Chirurgical Society, and we must remark in reference to our meetings, that Dr. Fraser was seldom absent, invariably when present he entered into debate on subjects which came before the Society, and his observations were listened to with interest and attention, for what he did say bore the stamp of authority and previous preparation. This was a most pleasing and instructive feature of our meetings, and one to which, in a great measnre, is due the success and interest taken in the society by the younger members of the profession. His remains were interred at Mount Royal Cemetery, on Saturday, the 27th ult., the funeral being attended by a large number of professional and other friends. His death has left a blank in our ranks which will not be easily filled up. Dr. Fraser was painstaking and very successful, both as a surgeon and physician, he was a constant student, and did not confine himself to works connected with his own profession, for his information was extended and various.

After the funeral, the profession met and passed a series of resolutions. These we subjoin, taken from the Montreal *Gazette* :—

THE LATE DR. FRASER.

At a large and influential meeting of the Medico-Chirurgical Society, of this city, specially convened on Saturday evening last, the following resolutions were unanimously passed :—

Moved by Dr. PELTIER, seconded by Dr. REDDY, and

Resolved—"That the members of the Medico-Chirurgical Society of Montreal, deeply regret the loss of their late friend and associate, William Fraser, whose high qualities as a professor, physician and citizen, justly endeared him to his colleagues, and fellow-citizens, and whose self-sacrifice and devotion to duty shed lustre on our Profession."

Moved by Dr. DAVID, seconded by Dr. F. W. CAMPBELL, and

Resolved—"That this Society desires to place upon record the interest in its meetings shown by their late associate, whose active assistance helped so much to render them interesting and instructive."

Moved by Dr. THOMPSON, seconded by Dr. DUGDALE, and

Resolved—"That this Society extends to the family of the deceased their heartfelt sympathy in the great bereavement which has fallen upon them."

Moved by Dr. FENWICK, seconded by Dr. GODFREY, and

Resolved—"That the Secretary of this Society be instructed to forward a copy of the foregoing resolutions to the family of our late member, and to the city papers."

THE LATE DR. J. B. BLANCHET.

This promising young man expired at his residence in the City of Quebec, on the 21st of July, 1872. Graduating at McGill University in the spring of 1863, he proceeded to England and pursued his studies at St. Bartholomew's Hospital, London, where he became dresser to the late Sir William Laurence, Bart.; in January, 1864, he became a Member of the Royal College of Surgeons of England, and the following April took out the License of the College of Physicians, London. After spending some months on the continent of Europe he returned to Canada, where he entered private practice in the City of Quebec.

At the second meeting of the Canadian Medical Association, held in Toronto, in 1869, Dr. Blanchet was elected hon. secretary for the Province of Quebec, to which position he was re-elected in 1870 and 1871. At the last triennial meeting of the College of Physicians and Surgeons, Dr. Blanchet was elected one of the Governors of the College to represent the City of Quebec, and at the last semi-annual meeting of the Governors of the College held in this city, Dr. Blanchet was present, but was at the time in ill-health. Those who knew him had no idea then that his life was in jeopardy.

In extending to the bereaved friends our heartfelt sympathy, we can only add our belief that from what we knew of the deceased, his amiable and gentlemanlike deportment, had he been longer spared, his career would have been full of brilliancy.

Medical News.

DISTRIBUTION OF PRIZES AT ST. THOMAS'S HOSPITAL.

On Thursday, June 27, his Grace the Lord Archbishop of Canterbury distributed prizes to those students of St. Thomas's Hospital who had succeeded in gaining the highest number of marks in their respective years at the competitive examinations during the past academical session. The Archbishop appeared gratified with the enthusiastic reception accorded to him. In his address his Grace acknowledged with emphatic earnestness his personal indebtedness to the medical profession for his restoration to health after a protracted and serious illness. The Archbishop then alluded to the various links which bind the clerical and

medical professions in their capacities as ministering to the sick and the suffering around us. The consolations of the gospel and the skilfully devised remedial measures should be judiciously interwoven and blended to the comfort, succour, and perhaps restoration of those in need of such divinely appointed help. The apostles, following in the footsteps of their Lord and Master, "went about doing good," and "healing all manner of diseases among the people."

The Archbishop reminded the company of a fact not by any means generally known, and one that most of those present were probably unaware of, to the effect that the power of conferring degrees upon those gentlemen, qualified to receive the same, had descended to his Grace from a remote antiquity. Previous to the Reformation this power was exercised by the Pope, but a statute was passed after the Reformation entitling the Archbishop of Canterbury to that precriptive right. A more recent Act of Parliament, however, deprives gentlemen thus qualified from making use of such titles to practise their Profession.

The Archbishop concluded his address by urging the ladies and gentlemen present to assist as far as they were able in promoting the social and moral welfare of the medical students. By far the larger majority of these young men, having left their quiet homes in the country, were deprived of parental care and supervision, and exposed to all the temptations and frivolities of a London life, at a time when, from their ignorance of the world and the pliancy of youth, they were least able to resist the subtle influences around them. With the view of providing some healthful recreation for the students away from all contaminating influences, the Archbishop has most liberally offered free access for the students to the grounds of Lambeth Palace, where there is ample room for cricket, football, and athletics.—*Medical Times and Gazette.*

MENTAL EFFECTS OF RHEUMATISM.

Dr. Faure says, in a recent French Journal, that a man who is subject to rheumatism will very often tell you, if you ask him—for he has no reason to refer what passes in his mind to the sensations in his arms or legs, or elsewhere in his muscular system—that he has moments of despondency without cause, of inquietude, of forlornness, inexplicable to himself. Then he is discouraged without cause, and sees everything in the shade ; that which ought scarcely to be the object of a slight care, becomes the cause of a cruel torment ; he is without force, his thoughts can be fixed on nothing, all intellectual work is impossible ; if he wishes to solve

a problem, he soon experiences fatigue and heaviness of his head, which often turn into a violent headache; then his sensations are altered, his affections cease, he is indifferent to everything; that which has the most right or power over his mind, remembrances which are most dear or most painful, have no interest for him. His character has changed. He is conscious of his condition, and can for a few minutes rouse himself out of it. A crisis may follow, his head is congested, he feels quite giddy. Finally, all these symptoms disappear, and his mind recovers its tone and clearness. The attacks vary much with individual disposition.—*The Doctor.*

HEALTH OF FACTORY-WORKERS.

At a meeting of the Centenery Club, Pal lMall, on June 28th, Mr. Motteshead made a statement that, on account of the greater speed of the machinery used in factories, the results to the work-people were an over-strained nervous and physical condition, feverish excitement, and heart disease. To this assertion Mr. Hugh Mason gives an emphatic denial, declaring that, both from his own personal and practical experience in factories, the physical and mental condition of the work-people is greatly improved by the machinery used, and by the sanitary regulations enforced; and he challenges Mr. Motteshead to prove the statement made. We should be glad to hear the opinions of factory surgeons on this subject.—*The Doctor.*

ERYTHEMA NODOSUM.

Dr. H. S. Purdon, whose Quarterly Reports on Dermatology are known to the readers of *The Doctor*, contributes a paper on Erythema Nodosum, to the *Dublin Medical Journal* for June. He seems to have had frequent opportunities of observing this affection, and thinks it should be classed with hæmorrhages of the skin, not amongst the inflammatory group. The lower limbs although the usual seat of the eruption are not always so, the arms occasionally being attacked. The treatment recommended is iron and quinine, whilst locally shampooing the legs or part affected with hot sea water is to be recommended; a Daimetta flannel bandage worn during the day, as all erythematous legs are below the normal temperature. In obstinate cases the peroxide of hydrogen and tincture of steel are very useful, a teaspoonful of the former with ten to fifteen drops of the latter in a wine glassful of water twice daily.—*The Doctor.*

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

The First Epidemic of Cerebro-Spinal Fever in Montreal. By R. P. Howard, M.D., L.R.C.S.E., &c.; Professor of Theory and Practice of Medicine, McGill University.

(Read before the Medico-Chirurgical Society on the 3d August.)

Gentlemen: Having recently seen a few cases of a disease which, so far as I can learn, has never previously been observed to have prevailed in this city, and the affection being one of a most grave nature, I have thought it might be interesting, as well as appropriate, to draw the attention of the Society to the subject.

On the 3d April last I was called to visit a boy aged nine years, residing in St. Maurice street, but attending the Christian Brothers' School in McCord street. He had been in good health until the morning of the 2nd April, when, on waking, he began to vomit. The emesis continued "off and on" all day, and the bowels moved twice. He also complained of pain in his head and stomach, and was heavy and stupid all day. He had had small-pox six years ago.

3d April, 11 a.m.—Temperature, 99 4-5° F.; Pulse, 100. Is very restless; throws himself about, and would fall off the bed if not watched. Very stupid; can be roused, but then mutters rather than speaks, and moans and screams as if hurt; resembles an intoxicated person who has not quite become unconscious. While head and body are hot, feet are cool. Tongue dry and red at point; thin white fur over centre. On neck, chest, and body generally are found purple petechial spots of various sizes and unaffected by pressure.

Diagnosis.—Acute Purpura, but whether antecedent to Cerebro-Spinal Fever or Variola cannot decide. A severe epidemic of the latter now prevails.

To be wrapped in a blanket wrung out of warm water for four hours; then to be rubbed dry. Two teaspoonsful of brandy and 1-36th grain strychnia hourly.

5 p.m.—Temperature, 102°. Much warmer; less stupid; did

not like the warm bath, and after three hours it was removed. Continue treatment.

4th, 10:30 a.m.—Temperature, 99 4-5°; Pulse, 75, small, soft, occasionally irregular; less restless; complains good deal of pain in head, particularly forehead; still grinds his teeth; although drowsy he is less stupid looking and more intelligent; pupils active; conjunctivæ not injected; no extra heat of scalp; tongue moist, tip red, centre yellow-white; vomited once this a.m., a yellow fluid; thirsty; one alvine discharge this morning; many petechiæ upon either upper lid; a few upon face; many over rest of surface; cheeks flushed; a red circumscribed swelling of about the area of a crown piece upon the dorsum of the right hand; another as large as a sixpence upon the right instep, (these resemble the wheals of urticaria, but are not itchy); both forearms partially flexed, and tendon of biceps rigid; forcible extension painful; right ham-strings in same condition; left not; no retraction of head noticed; mouth and lips in motion as if eating.

R. Potass. Bromidi, ʒij.; Potass. Iod., ʒi.; Ergotæ Ext., Fl. ʒiv.; Digitalis Tinct., ʒiv.; Aquæ Ad., ℥vi. A dessertspoonful every two hours. Omit strychnia. Beef-tea, cold milk and barley-water as food.

5th, 10:30 a.m.—Has passed a sleepless day and night; slept only in snatches till 4 a.m., when he became quieter and began to sleep longer and better; has complained all day of pain in head and limbs; rigidity affects both arms and both legs; abdomen retracted, and its walls rigidly contracted; head somewhat retracted; no tenderness of spinous processes; brows knit; grinding of teeth persists; temperature, 101°; pulse, 84, unequal and irregular; R., 20, regular; retches but does not vomit; small, liquid, yellow stool to-day; moderate thirst; petechiæ turning a dirty yellow, and fading as ecchymoses do; a measly mottling along the right forearm; some fresh wheals, scarlet-coloured; one at base of right great toe, another near outer malleolus, a third over right patella, (these are all very *tender* but *not itchy*); two defined pink patches, not raised, upon dorsum of left foot; a similar long red patch along radial border left forearm and thumb; one, slightly raised, the size of a sixpence, at base of right thumb.

Continue mixture; bladder of ice to vertex; another to nape of neck; Unguentum Belladonnæ to be rubbed down the spine every three hours.

6 p.m.—Temperature, 100 4-5°; Pulse, 108; R., 32; face more flushed; purpuric spots fading rapidly; intercostal muscles seat of tonic spasm.

To have a dose of chloral-hydrate if unable to sleep.

6th, 10:45 a.m.—Rested well all the evening and most of the night, and had but little delirium; much more collected and rational; is more conscious of his trifling ailments, and complains that his tongue is sore. This is due to a collection of aphthæ along the border of the tongue, which resemble a patch of herpes; petechiæ almost gone; wheals fading and reducing in circumference; those on left foot, which are the latest, are almost gone, and one has a yellow colour like a fading bruise-stain; temperature, 100 3-8 ⊃; pulse, 120, small and firm; R., 28; tongue moist, borders red; yellow-white fur on centre; no emesis nor alvine discharge; urine high-coloured; depositing lithates; not tested for albumen.

Countenance open and less distressed looking; knitting of brows gone; less retraction of head; tonic spasm of other parts as before; about the flexure of the right elbow and anterior aspect of right forearm, are numerous red, congested patches, not unlike the exanthem of measles; the general appearance of the forearm reminds one of the "subcuticular rash" of typhus; puffy swelling of both elbow-joints, most marked over head of radius. Continue treatment.

7th, 9:30 a.m.—Cried so much last night from pain in the head that a dose of chloral was given, and in a few minutes he fell asleep and slept till 5 a.m; is now perfectly sensible and somewhat cross; no trace of petechiæ; several of the red blotches still visible, but very pale; a new one not elevated upon face; slight effusion into left knee-joint, and considerable swelling of right foot, chiefly of dorsum.

In lifting him off the bed this morning his father found his body quite stiff; spasm of the flexors continues, and slight retraction of the head; bowels moved to-day; passed urine in the bed last night; temperature, 103 2-5 ⊃; pulse, 126. Continued treatment.

8th, 11 a.m.—Slept well till 3 a.m.; slight nocturnal delirium; perfectly rational now; pupils active and of medium size; no dislike to light: pain in neck, with retraction of head; spasm of flexors continued; red patches all gone, except one which appeared upon cheek yesterday; right knee and left hip painful; two formed stools; urine abundant; pulse, 118.

9th, 11:30 a.m.—Temperature, 102 4-5 ⊃; pulse, 120; slept well, without delirium; cervical pain and spasm, and pain in the head continue; three herpetic vesicles upon ulnar border of left thumb; less swelling of joints; one alvine evacuation; don't like the ice application.

Continue mixture. Hydrarg. c. Creta, gr. iij.; every four hours.

10th.—A good night; temperature, 102 1-5 ⊃; pulse, 120; less

retraction of head, but spasm of flexors continues; swelling leaving the articulations; tongue cleaning rapidly; a liquid stool this a.m.; epistaxis in the night.

11th.—Another good night; perspired freely yesterday; temperature 101 3-5°; pulse, 116; no retraction of head; ham strings and bicipital tendons somewhat tense; still some effusion into both elbows and left knee; clean moist tongue. Omit grey powders, of which he has taken nine. Continue mixture.

12th.—Slept well; temperature, 100 4-5; pulse, 118; tongue a little coated; very little tension of tendons; right elbow more swollen and painful; lies chiefly on right side. Continue mixture, which has been given very regularly unless during sleep.

14th.—Continued and rapid improvement since; appetite very good.

16th.—Found at the hall door in his night shirt. He had been brought down to the parlour, and, hearing a noise at the door, tottered to it to see what was going on. His convalescence was complete and rapid.

This was the first case of so-called "Epidemic Cerebro-Spinal Meningitis" I had ever seen, and appeared to be an example of what has been called the "purpuric" variety, the "Malignant Purpuric Fever" of Stokes. Very soon after, on the 15th May, I had an opportunity of seeing, with Dr. Gardner, in the West end of St. Joseph street, a second case very like the one just related. The subject, a boy aged ten years; the seizure sudden, while in good health; the leading symptoms, early vomiting, pain in head without much heat of scalp, delirium, cerebral oppression, early appearance of petechiæ, then retraction of head, rigidity of posterior crural, abdominal and thoracic muscles, effusion into one ankle-joint, followed by comatose and typhoid symptoms, and death in the eighth week.*

On the 26th of the same month, in consultation with Dr. Fuller, a third case of the disease came under observation; this time three miles beyond the city proper, and upon the Lower Lachine road. It resembled, in most of its features, the two cases already described. A healthy boy, between eight and ten years old, suddenly seized with severe illness, early emesis, pain in the head without great heat of scalp, more or less stupor, then retraction of the head, and severe pains in various parts of the body, but neither cutaneous extravasations nor articular effusion. This case recovered.

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* This and a second case were admirably reported by Dr. Gardner at the same meeting at which this paper was read.

Strange to say, on the same afternoon Dr. Bessey asked me to see, in Fortification Lane, near St. Peter street, a boy of about ten years of age, who had been quite well on the 24th May, and was suddenly seized, on the 25th, with signs of collapse, cold surface, sunken eyes, rapid small pulse, cyanotic aspect. These symptoms were followed by those of reaction, attended, however, with convulsions, delirium, restlessness and more or less stupor. He had been ill about twenty-four hours when I saw him with Dr. Bessey. He then exhibited all the symptoms of profound collapse, combined with incessant restlessness, jactitation, delirium, and more or less stupor. Death ensued the same evening. It appeared to me to be an example of the third variety of the disease described by Radcliffe, the "Fulminant" form. I don't remember whether any spots existed on the surface of this fourth case.

I have mentioned these cases seen with my colleagues only with the view of proving that the disease is truly the so-called "epidemic cerebro-spinal meningitis," as they afford examples of two of its three recognised varieties. I hope they will themselves state to the Society the features of their respective cases.

All the subjects of the preceding cases, you will have noticed, were boys between eight and ten years of age, but on the 20th June I was requested to visit, in Ottawa street, a female child twenty months old, of whom the following history was elicited: In good health till 8th June, when it appeared less lively than usual; dull and drowsy upon the 9th, but not feverish; soon vomiting set in with fever, and then general soreness of the surface, so that the child cried when moved; during the first week the child frequently put its right hand to its head. No eruption on the skin was noticed, and the mother attributed the symptoms to teething.

When seen by me on the 20th, the child was in the following condition: Appears stupid and helpless; unable to sit up; pupils large and fixed; sclerotic uninjected; strabismus, with oscillation of eyeballs; moderate retraction of head; skin presents a peculiar, light scarlet blush, from capillary injection; a scratch is soon followed by a line of deeper redness, as if the capillaries had became suddenly enlarged ("tache cerebrale"); no rigidity of extremities; face pale; features vacant.

The retraction of the head had been noticed first on the 16th. The emesis has not returned; bowels move once or twice daily; urine is passed in bed; pulse small and shabby—120–130.

To have beef-tea, a teaspoonful of wine hourly, and the following mixture: ℞. Potass. Bromidi, ʒiss.; Potass. Iodidi, ʒi.; Digitalis Tinct., ʒi.; Syrupi Aurantii, ℥i.; Aquæ ad., ℥iv. A tea-

spoonful every three hours. An ointment of the Red Iodide of Mercury, with Extract of Belladonna, to be rubbed down the spine every four hours, and if scalp grows hot, ice to be applied.

21st.—Rigidity of legs set in yesterday afternoon and continues at intervals to-day; left great toe is extremely extended at times; no herpes nor articular swelling; slept in snatches last night; head not particularly warm; pulse, 150—weak, small, and irregular. Continue treatment.

22nd.—General tetanic spasm seized arms and legs yesterday, and have recurred at intervals since. In these attacks, the back, arms and legs became rigidly extended; the feet extended and adducted; the left hand clenched and pronated; pulse very small and frequent; child cannot last long. Death ensued during the night.

There is some room for question as to the true nature of this case, but I have myself no doubt that it was not an example of that common affection Tubercular Meningitis. It may have been an instance of that comparatively rare disease of which I have seen a few cases, Sporadic Cerebro-Spinal Meningitis; but, in view of the recent occurrence of several cases of "Epidemic Cerebro-Spinal Meningitis," it is not improbable that it was an example of the "Simple" form of the latter affection—that in which purpuric symptoms are wanting.

As to the *nature* of this so-called "Epidemic Cerebro-Spinal Meningitis," the opinion now generally held by pathologists, that it is a peculiar form of fever and not merely a local inflammation, is probably correct. For, first, the circumstance that there are varieties in the disease, in one of which the constitutional symptoms are so intense that they may destroy life before the local lesion—the inflammation of the cerebro-spinal membranes—has been developed, places this febrile affection amongst those well-known Fevers, Typhus, Enteric Fever, Scarlatina, Variola, &c., in which, occasionally, the same malignancy is observed, and the vital powers are overwhelmed in a few hours, before time has elapsed for the evolution of the disease. Secondly, the suddenness and violence of the invasion; the profound prostration of the nervous system at the outset, in severe cases, as shown in the pale cold surface, the feeble pulse and heart's action, the intense restlessness, peculiar stupor and the delirium; and the daily occurrence of purpuric symptoms, in some cases, render it highly probable that some morbific agent, some specific fever poison has entered the system.

Such is the case in malignant small-pox, for example, in which, together with similar prostration of the nervous system, there is a marked tendency to the occurrence of purpuric symptoms at

the invasion of the disease and before the appearance of the characteristic eruption.

Previous to the appearing of this cerebro-spinal fever amongst us, the manifestation of purpuric symptoms at the *outset* of a febrile disease has, in my own experience, nearly always indicated the existence of variola, and I do not know any mere inflammatory disease in which purpuric symptoms occur *early*. That cerebro-spinal fever resembles, in these respects, small-pox, is a strong argument that it is also a zymotic disease, caused by a specific poison.

Thirdly, The same view is supported by the circumstance that in some cases of the disease no lesion of the nerve centres or their coverings is found after death; which seems to prove that the local affection is not essential, although it is usually present.

Fourthly, Its epidemic character supports the same view, for most, if not all, epidemic diseases are now held to originate in a specific febrile poison.

Fifthly, There are facts, not, perhaps, of an absolutely conclusive nature, tending to show that cerebro-spinal fever is occasionally communicable from the sick to well persons, just as cholera is; and these facts, as far as they are reliable, favour the idea that the disease has its own specific poison, like all other specific fevers.

Sixthly, The existence of well marked signs of inflammation of the meninges of the brain and cord, and of those centres themselves, is not opposed to this view; for it is quite in harmony with what is known of other fever-making poisons to suppose that in this affection the poison has a special action upon the nerve centres and their coverings, just as the poison of typhoid fever has upon the intestinal glands, and the poison of whooping cough upon the pneumogastric nerve or its centre. Indeed, it is only upon the supposition that some speeific poison has produced a specific form of disease that one can explain the epidemic prevalence of inflammation of the cerebro spinal centres; primary or idiopathic cerebr-spinal meningitis, in healthy persons, being of so rare occurrence, if it occur at all, that the pathological doctrines of the day deny its existence. Sporadic inflammation of the membranes of the brain and cord is a rare affection, and originates either as a manifestation of some fever, such as typhus, or variola, or pyæmia, or of some constitutional disease, as syphilis, gout, rheumatism or tuberculosis; or is secondary to some local lesion, such as injury or disease of the bones, effused blood, tubercle, and morbid growths, &c.

I have nothing to say from personal experience respecting the best method of *treating* the disease. From the varying but always

high mortality of the several epidemics recently witnessed in the United States and in Continental Europe it may, I fear, be inferred that we possess little power over the course of the disease.

Recognising the disease as a FEVER, modern experience suggests, if I am not mistaken, that the province of the physician quoad its treatment is to *guide*, not to drive it to a favourable termination. Before this audience it is unnecessary to discuss the general principles upon which this, in common with all fevers, is to be treated; but as in typhoid fever or scarlatina, for example, there are certain special indications to be fulfilled; so there are in cerebro-spinal fever, and upon these I will offer a few observations.

The main, special indication appears to be, to lessen the severity and prevent the extension of the inflammatory process, engaging the cerebro-spinal membranes and, more or less, the centres they enclose.

The testimony in favour of the local application, at the outset, of ice to the head and spine, short of producing over-depression, is stronger than of any other remedy. If there exist much prostration, external heat is to be applied by bottles of hot water, bags of hot salt or oats, warm flannel bandages, &c., during the employment of the ice and subsequently.

A difference of opinion obtains as to the value of the local abstraction of blood by leeches and cups applied behind the ears and to the nucha.

During the epidemic observed in 1865 by Dr. Burdon Sanderson, upon the Lower Vistula, "free local bleeding during the first few hours, while the patient was still vomiting, occasionally produced the most striking results." And in the Philadelphia epidemic of 1866 Dr. Stillé states that cupping the nape of the neck, in the more sthenic cases, was of "essential service in mitigating, and generally, indeed, in wholly removing the neuralgic pains" of the disease.

The Germans, of whom the late Niemeyer may be taken as a fair representative, employ calomel in frequent doses, much in the same way as it has usually been employed in sporadic meningitis; and, however unfashionable it may be, I own to the view that it is likely to be useful, if not in limiting the quantity of the inflammatory products, in promoting their more speedy removal.

While giving the calomel the other remedies should be faithfully employed. It is right to add that English and American physicians, as a rule, do not advocate mercury in the disease.

Antipyretic doses of quinine, at the very beginning of the disease, have been favourably reported upon by a Committee of the American Medical Association. As, however, the testimony respecting

this means is quite conflicting, it may be that when the disease obtains in malarious districts quinine may really prove useful. And I may mention in this place the interesting circumstance that, in Mr. Burdon Sanderson's opinion, malaria was one of the only two local conditions (the other was a cold climate) which appeared, probably, to have had some share in determining the preference of epidemic meningitis for the two localities in which it manifested itself most severely about the Lower Vistula.

Of course, large doses of quinine may be occasionally useful when the pyrexia is very high, but then it is used, as in other fevers with hyperpyrexia.

Stillé and other American physicians, and some Germans, notably Ziemssen, think highly of opium in the early stages, given in moderate doses (1 gr.) every hour or two, according to the severity of the case; and Burdon Sannderson testifies to its value "after the initial symptoms had subsided." The indications for it are: restlessness, sleeplessness, maniacal delirium, pain and spasm. I cannot help thinking that chloral hydrate and bromide of potassium will be found equally useful and quite as safe for the same indication.

Not the least important point of the management of the disease, in my opinion, consists in the maintenance of the vital power by judicious feeding and, when the symptoms require them, by the administration of stimulants.

Further experience is needed as to the value of a combination of the iodide and bromide of potassium with ergot, as well as of Calabar bean, which is the latest remedy that I have heard of. The last named agent, owing to its power of diminishing the reflex power of the nerve centres and, perhaps, suspending the conductivity of the motor nerves, may be expected to prove useful in allaying the painful spasm of the muscles.

It is a matter of much interest to myself why a disease which appears to have been observed, but not separated from other fevers, in Europe, either in particular countries or widely diffused ever since the fourteenth century; which was first recognised in the United States and some parts of Canada in the beginning of this century; and which has continued to recur from time to time in various localities, and frequently over very large areas in the neighbouring Republic; which of late years has been seen in the Eastern Townships and at Ottawa, and which during the past winter has been prevailing in the City and State of New York, in Chicago and Detroit, Indianapolis, and in some parts of western Canada, should have visited our city now for the first time, or should be now recognised by us for the first time. In our present

ignorance of the etiology of the disease I can offer no sufficient explanation of its manifestation amongst us this Spring. Let it be noted, however, that there has been an unwonted prevalence of zymotic diseases in epidemic form during the past winter. I need not mention the wide diffusion of small-pox and the unusual prevalence of erysipelas and puerperal fever, and the extensive epidemic of measles.

It is a pleasant reflection, however, that this fatal disease, "cerebro-spinal fever," as a rule, is limited in its outbreaks to a small section of a population, and, unlike cholera, has not a marked tendency to be diffused far and wide along the great lines of communication in a country.

MONTREAL, 3d August, 1872.

Notes of Three Cases Cerebro-Spinal Fever. By JOHN REDDY, M.D., L.R.C.S.I., &c., Physician to the Montreal General Hospital, &c., &c.

(Read before the Medico-Chirurgical Society of Montreal.)

Case I.—On the 22nd April, 1872, I was sent for to see M. F., a lad aged nine years, of small stature, residing in Acqueduct street, near railway crossing. His mother gave me the following history: He had been at school the day previously, and while there, said that he had received a hurt in the calf of his right leg from a form he had been sitting upon. He complained several times since then how much it pained, and occasionally caused him to cry. When at dinner to-day he had but little appetite, and towards its close was seized with severe vomiting, immediately followed by a shivering fit, and a few hours afterwards he complained of very severe pain in his head, so that he had to be carried to bed. I saw him at 5 p.m; he was then lying bent up in bed, face flushed, with a peculiar pinched appearance; pulse 84; temperature 99; a patch of Herpes near the angle of his mouth, a second on the chin, and one on the neck—right side; at intervals of four or five minutes he constantly cried out, "Oh! my head," which was very hot, and what, at the time, I considered peculiar, he would hardly allow me to touch it or any part of his body, ever so gently, without complaining that I had hurt him; general hyperæsthesia existed; his tongue was clean, though not moist; pupils were regular, but somewhat intolerant of light; bowels had been freely opened in the morning, and his urine appeared normal in appearance and quantity; his sleep since the commencement has been of a disturbed character.

I ordered his feet to be placed in a mustard bath, a bladder of

ice to his head, and a mixture to be given him every two hours containing small doses of Tr. Aconite, with Liq. Ammon Acetat.

23d.—Spent a restless night, tossing about, crying with pain in his head and all over the body; pulse 94; temperature 99; face not flushed, but a regular sardonic grin is manifest; his neck quite flexed; back and spine partially; his legs, thighs and abdomen are thickly studded over with a fine purpuric rash. I recognized now the case to be one of Cerebro-Spinal Meningitis—the first I had seen.

I ordered him a mixture: ℞ Bromid Potass, ʒiss; Iodid Potass, grs. xxiv; Ext. Belladonna Dur., grs. ii; Syrup Aurant, ℥ss; Aquæ ad., ℥iij. A dessertspoonful every fourth hour; bladder of ice to be kept to his head and spine; milk and beef-tea as much as he desired.

5 p.m.—Pulse 92; temperature 92 2-5; no change of any importance. Ordered the treatment continued: to preserve the urine.

24th.—Pulse 92; temperature 102 2-5; pains in the head and all over the body, very severe during the night; his neck is much more flexed; complains of severe pains through his temples and through the eyeballs; sclerotic rather congested; pupils regular; bowels costive. Ordered a senna aperient; continue other treatment; four leeches to be applied to each temple; milk and beef-tea as he can be got to take them; examined urine; is a little darker than natural; does not contain albumen.

25th.—Pulse 90; temperature 100 1-5; pain in the head not so severe, but has great pain all over abdomen, not wishing it touched; had a free motion early in the morning; keeps his eyelids closed all the time, not wishing to look at light; had only four leeches applied to his left temple; his father felt timorous applying them to the right.

26th.—Pulse 100; temperature 100 2-5; had a very bad night; in much pain and sleepless; declines, occasionally, to take nourishment and is very irritable; he will not allow the ice to be changed he is in such a hurry to have it kept applied; the purpuric spots are gradually disappearing; he appears in a very precarious state.

7 p.m.—He became suddenly very much worse, screaming with pain; he was seen, in consultation with me, by the late Dr. Fraser, who recommended the Binodide of Mercury with Belladonna as an ointment, to be rubbed to the neck and spine, and to pursue my present plan of treatment.

(I desire to note here that the Dr. informed me that within a period of two months he had treated two cases of Cerebro-Spina Meningitis successfully.)

27th.—Pulse 100; temperature 102 1-5; no improvement; could

not bear the ointment rubbed in, as he could not bear to be touched. I ordered it to be spread upon stripes of linen, and thus applied to nape of neck and spine, under the ice. I also had half-drachm papers of the Camphorated Mercurial Ointment placed in the arm-pits and groins, to be repeated every six hours; eight papers ordered.

28th.—Pulse 104; temperature 102 2-5; appears very weak; the ointment was removed in three hours from spine and nape of neck, producing merely slight redness; he sleeps but little, and that of so disturbed a nature that I ordered a chloral mixture—10 grains, to be repeated in half an hour, by a half dose, if sleepless.

5 p.m.—Seems very much improved: the chloral had a very good effect; he is taking his nourishment much better.

7th May.—His state has varied frequently since last date, but from that period his neck and spine have been gradually assuming their natural state; he appears to be very weak, but convalescence is gradual; he has often sharp and sudden attacks of pain all over, which as quickly subside, especially if excited; he still keeps his eyes rigidly shut. Ordered his mixture to be stopped, which he has taken hardly any of the past two days; to give him a teaspoonful of brandy and water every three or four hours, and as much nourishment as he can be got to take; I find, on making him open his eyes, the right pupil is quite contracted, and the left dilated to its fullest capacity.

14th.—Had been doing well till to-day, when he was suddenly seized with vomiting, pain in the head and bowels, and partial flexion of his neck again; pulse 120; temperature 105 2-5; urine dark-coloured; bowels regular; no cause can be assigned; I again placed him on the Bromide of Potassium mixture.

15th.—Pulse 110; temperature 100; seems better, but weak, and cannot sleep. Ordered to give him the Chloral mixture when necessary; continue nourishment and brandy, which seems to agree well with him.

4th June.—About three days after the relapse the pains gradually subsided, and his neck became relaxed, and from that time till this date he suffered from a low fever, and often from sleeplessness, requiring occasional doses of Chloral, which always agreed well with him; his treatment consisted chiefly of small doses of brandy often repeated, milk and chicken broth.

24th June.—He was able to sit up in bed, and has a good appetite; he appears blind of his right eye, the pupil being rigidly contracted, while in the opposite eye it is largely dilated.

10th July.—Visited him to-day; he can walk about the room, and would remind you of one suffering from Locomotor Ataxy;

when you tell him to stand with his feet approximated, or to walk with his eyes shut, he would instantly fall; he only suffers occasionally from constipation, which is easily regulated by senna tea.

7th August.—I examined him with the ophthalmoscope: right eyeball soft, pupil contracted, unaffected by light; left ball about natural, pupil dilated; with oblique light, in right eye complete cataract exists, with shrivelled appearance of lens, dotted on its upper and inner margin with pigment; left eye red reflex; disc appears natural, and vessels pretty regular; no atropine used. A few days afterwards Dr. Howard also examined, who says: "I have but little to add to what you have made out." Right eye chiefly posterior capsular cataract, softened eyeball; left eye no affection of lens; some congestion of capillaries of the fundus of the optic disc; slight tortuosity of retinal veins, and indistinctness of the arteries; vision somewhat impaired; reads Snellen's XX at seven feet.

It is a fact worth recording that the left temple had four leeches applied to it at the time when he complained of pains there and through the eyeballs. That is the side in which vision now exists.

Case II.—14th May I saw a case, in consultation with Dr. Trenholme, in Roy Lane, a girl 6 years old, had been ill five days before I saw her; she had suffered with intense pain in her head and general hyperæsthesia, and was now suffering; her neck and spine were very much flexed; her pulse was rapid; her pupils very much dilated; the case had been early recognized; her symptoms had been, at the start, vomiting and rigors, followed by pains all over the body; constipation, also existed; she had had ice freely applied to the head and spine from the commencement, and small doses of Castor Oil relieved the bowels; she had plenty of milk given as nourishment; we agreed to put her on the mixture of Bromide and Iodide of Potassium, with small doses of Extract of Belladonna. A few days after this visit the Doctor left for England, requesting me to take charge of the case. She continued to improve daily, and on the 10th June was able to sit up; her appetite good. I have seen her twice since that, and the only remnant of the disease left, (if it may be called so,) her pupils have remained largely dilated; her eyesight was not impaired at any time.

Case III.—On 6th August was sent for to see H. H., aged 26, about four feet six inches high; man of strong mind, living on Commissioner street, near Montreal House. His mother states that two days previously he had excited himself a good deal by running quickly, and came home overheated and very tired, seemingly quite exhausted; that night he vomited frequently; took shivering fits, could not sleep, and complained of pain in his head and

all over the body; his appetite was quite gone, and his bowels confined; he gradually grew worse, and when I saw him this afternoon I easily recognized his disease; lying on his left side; neck and spine quite flexed; head hot and skin dry; said his head pained him exceedingly; could not touch any part of his body without causing him intense suffering; pulse 88; temperature 99; tongue clean; marked risus sardonicus; on his legs, thighs, arms, and partially over the abdomen, dark, raised, purpuric papulæ existed, and both legs were covered with one large purpuric effusion, like large jam marks; he constantly moans with pain. Ordered him the following mixture: ℞ Bromid Potass, ʒij.; Iodid Potass, ℈ii.; Ext. Belladonna, grs. iij.; Syr. Aurant ℥ss.; Aquæ ad., ℥vi., ℥ss. every four hours. Ice to head and spine.

7th.—Pulse 100; temperature 100 1-5; tongue clean; bowels were opened early in the morning; slept but little since I saw him last evening; pains unaltered; takes medicine or food with difficulty, as the very effort makes his suffering greater; he lies on his right side to-day, and his legs and arms are rigid; he talks incoherently. Continue his treatment. I also directed the following pill to be given every fourth hour; Pulv. Opii., gr. ii.; Calomel, gr. ¼.

5 p.m.—Pulse 100; temperature 99 2-5; no change for the better; spots somewhat faded; the patches on his instep have now changed color, like to simple erythema; the least touch worries him, on that account his attendants find it difficult to administer either nourishment or medicine; his mind wanders a great deal; he sings and laughs alternately.

8th.—Pulse 100; temperature 98 3-5; tongue moist and creamy; bowels free; passed no urine since midnight; he appears dull and not in much pain, unless in the neighbourhood of his spine or neck; there is no hypogastric fulness; spots have nearly all faded from his body, and the insteps present now their natural appearance; rigidity of arms and legs also gone; takes nourishment better.

5 p.m.—Pulse 130; temperature 101 1-5; skin hot and dry; arms and legs slightly rigid again; his bowels have been opened twice through the night, but he has passed no urine; seems to suffer little or no pain, but is listless and lies quietly; drew off 1½ pints of urine; slightly acid; sp. grav. 1,020; color of dark sherry; contained about 10 per cent. of albumen; under the microscope a few epithelial cells.

9th, 10 a.m.—He seemed to be doing better till 2 o'clock this morning, when he suddenly grew worse; all his muscles are relaxed; his neck and spine are free; at either angle of mouth

two large Herpetic patches have appeared; his pulse 130; temperature 105 3-5; the respiration abdominal; he died at 2:50 this p.m. A post-mortem would not be granted.

877 St. Catherine St., Montreal, 16*th August*, 1872.

Case of Cerebro-Spinal Meningitis—Recovery. By George Ross, A.M., M.D.

On the 19th May last I was called to see Mary Ann McC., aged eight years, whom I found lying in bed, in a dull, apathetic condition, from which she could with difficulty be aroused, and immediately dropping off asleep as soon as she had returned a short, monosyllabic answer. The history of the attack was the following: Six weeks ago she had measles, but very mildly, and for some weeks past had been considered quite well. Yesterday morning she appeared to be unusually well, and in the afternoon played about out-doors for several hours. On coming home in the evening she complained of severe headache, and very shortly after vomited. During the night following the vomiting continued incessantly and with considerable retching, and great complaint was made of violent frontal headache. After each fit of vomiting she became drowsy and remained so until the stomach was again disturbed. Her mother tells me she noticed that during the past two days she voided no water until evening, and then only a small quantity, although she would make frequent efforts to empty the bladder. At present the child lies in a dull, stupid condition; face pallid; often cries out "oh my head"; vomited bilious matter soon after my entrance, and the same occurred four or five times whilst I was with her; pupils unequal; right more dilated than the left; the irides, when fully exposed to the light, keep alternately contracting and expanding; skin extremely hot; pulse, 140; no retraction of the abdomen; tongue coated with thick, dirty, brownish fur; bowels costive. I now looked upon the case as one of commencing cerebral meningitis, and consequently ordered the head to be raised on pillows, and all the hair removed, and a bladder of ice applied, and the feet to be bathed in mustard-water immediately; spoonfuls of rice water only to be taken, and a powder of Calomel, gr. iv., and Scammonii, gr. viii., at once administered, and to be repeated in two hours if required, and the following mixture: ℞ Pot. Nit., Pot. Brom. aa., ʒiss.; Syrup, ℥j.; Aq., ℥iv. One dessertspoonful every three hours.

20th May.—Still drowsy; vomiting continues; temperature, 102; pulse intermittent, 130; moans and complains of her head; answers rationally, but is a very slow at responding.

Ordered enema of castor oil and turpentine, and lime water with milk.

21st.—Vomiting less; pulse very intermittent and cannot be counted; no delirium or convulsion.

22nd.—Very restless and irritable; right pupil much dilated; complains of great intolerance of light; vomiting ceased; pulse 130; more steady.

Ordered blister to nucha, and calomel, gr., j., every three hours, instead of the mixture, which it was extremely difficult to get her to take.

23d.—Is very restless and uneasy, and makes constant moaning complaint of pain in the neck and legs, especially the left. My attention having been thus directed to the neck, I found that the head was greatly drawn back, the sterno-mastoid and trapezius muscles being quite prominent and hard. She screams violently upon the least attempt being made to raise the head from the pillow. The ham-string tendons are rather tense and are immediately tightened up upon any attempt being made to flex the legs. Temperature, 102°; puls, 140. On either side of the neck is seen a peculiar, oval, purplish patch, of about the size of a half dollar, deeply congestive in appearance, and only partially disappearing on pressure. The edges of these patches were not defined but gradually shaded off.

24th.—Stiffness and rigidity persist in the neck and in the legs; the patches on neck not so marked; intelligence clear but very slow in perception; there is constant murmuring and complaint of pain in neck and legs alternately; hardly any of the head; cannot be induced to look at the light; cannot bear to be touched without crying out and great excitement; pupils moderately dilated and sluggish; no vomiting, but takes food freely; pulse, 135, and very weak; temperature, 102 3-5.

Ordered a small quantity of port wine in addition.

25th.—Passed a bad night, screaming with pain, at intervals, in different parts, especially back of neck, right thigh and knee and right elbow; general intelligence seems better; answers questions much more readily; will look up and will draw up the legs slowly when told to do so; the muscles of the back of the neck remain very hard and tense, and the head is thrown completely backwards; there is apparently no spasm of any other muscles; pulse, 144; temperature, 102½.

Ordered enema of castor oil.

It will be unnecessary to give a further detailed report of this case, suffice it to say that from this date all the severe symptoms gradually abated; the tension of the affected muscles became

daily less; the pains slowly subsided; sleep was obtained; the tongue cleaned; and after a tedious convalescence, lasting over seven or eight weeks, she has finally completely recovered, and is now in the enjoyment of excellent health.

I may mention that I had diagnosed the case as one of cerebro-spinal meningitis before hearing of the cases occurring in the practice of Dr. Gardner, but his having happened to mention to me his observation of this rare disease served much to confirm me in the view I had taken of this case. The early symptoms pointed clearly to the head, and I believed at first it was really true acute cerebral meningitis, and treated it as such; but the subsequent symptoms, above described, soon led me to suppose that the coverings of the cord were involved as well.

Case of Cerebro-Spinal Meningitis—Fatal in Thirty-eight Hours. Occurring in the Practice of Dr. W. E. Bessey, Montreal.

Saturday, May 25, about 6 a.m., was called to see a boy aged ten years, who had been taken suddenly ill during the night with vomiting and convulsions, but who, up to the previous evening, had always enjoyed the best of health and spirits.

I found him quite insensible, breathing rapidly and sometimes spasmodically; pulse very quick—140, not full but tense: action of heart tumultuous, but indicating no lesion within itself; head very hot; also the skin of surface generally, except extremities, which are below the normal temperature; frequent muscular twitchings, with sudden jerkings of extremities and great restlessness; pupils contracted; tongue covered with a greyish fur over centre, fringed with a border, deepest along left side and at the tip; of an erythematous appearance; considerable retraction of head was also observeable, but not amounting to opisthotonos; the slightest movement or handling exciting restless movements or muscular twitchings.

History up to that hour was given to me as follows: About 2 a.m. the companion who slept with the lad was awakened by his cries and struggling, which amounted to violent kicking and jerking of the extremities, throwing back of head, and in a few minutes, becoming quieter, vomiting set in.

The family, who were aroused immediately, resorted to the use of a warm bath with good effect, and also administered a dose of castor oil. The vomiting did not continue.

Ordered cold to head and nape of neck, with heat to extremities, and the following every three hours:

℞ Potass. Bromide, ʒiv.

Ammon Bromide, grs. 80.
Liq Ammon Acet, ℥i.
Tr Aconit rad, gtt. xvi.
Aqua, ad, ℥iv.

Two teaspoonsfull every three hours.

Visited patient again at 9 a.m.; was quieter, but still insensible, breathing more regular; pulse same.

11 a.m.—Patient now much quieter; pulse, 120; perspiring freely; has had free motion of bowels; subsultus tendinum still present.

1 p.m.—Pulse, 116, falling steadily; muscular twitchings not so frequent; general muscular relaxation taking its place; insensibility still continuing—not so profound; there has been mutterings of incoherent sentences; has taken several swallows of milk at times in last three hours; perspiration continues profuse.

4 p.m.—Patient seems completely prostrate; action of heart feeble; pulse small and frequent; extremities cold; features pinched; in fact, everything denoting speedy collapse.

Attributing this sudden and extreme change in the condition of my patient to the aconite used, I stopped the remedy and ordered Spirits Ammon Aromat, mxv., every ten minutes, (in water,) with warm applications to general surface and extremities. A teaspoonful dose of Essence of Beef every hour, if swallowing continued good.

7 p.m.—Found patient much better; pulse, 120; breathing natural; no muscular movements; no hypersensitiveness; pupils less contracted; temperature of body normal; resting quietly, except rolling head from side to side, and slight muttering; skin moist.

Ordered Bromide to be given again every two hours, omitting Tr. Aconite rad

26th, 7 a.m.—Found patient much better; had passed a quiet night; slept a little towards morning; woke up about half-past five in the morning quite sensible, and (as the family supposed) almost well, but very weak for all he had gone through; has taken freely of milk and water, with a little broken cracker; pulse, 96—regular; pupils normal; tongue coated with brown fur, still red at tip.

1 p.m.—Was called to see patient, who, I was told, had continued rational in morning until 9 a.m., talking with the family, and knowing everybody; then fell into a quiet sleep and slept until eleven, during which time he began to perspire profusely, and a petechial eruption appeared greatest upon the legs, arms and chest. At eleven he awoke with screaming and violent con-

vulsive movements of extremities; body thrown backwards; eyes fixed and staring.

Warm bath had again been resorted to with but little benefit. Doubled doses of Bromide, giving them every two hours. Ordered ice to head neck and spine, with hot pediluvia. These measures had the effect of entirely removing, in a short time, the convulsive manifestations, which was succeeded by a state of collapse, accompanied by a cyanotic condition of the surface, denoting impending dissolution. Pulse very feeble and frequent, and patient insensible.

Requested a consultation with Dr. Howard, who saw him at 3 p.m. with me. Patient was now in a state of profound collapse. Ordered stimulants to be given freely; mustard poultices to spine and nape of neck; heat to be applied to general surface; brandy and water was given every ten minutes, but with no perceptible effect; mustard applied to spine and back of head; general warmth, &c., but all to no purpose; the patient sank and died at fifteen minutes past four p.m., in a state of complete collapse; after death the general cyanotic appearance subsiding into large purple spots, the petechial rash still remaining as it had made its appearance.

Requested a post-mortem, but found the friends seriously opposed to it. Renewed my application a second time without success, as I was desirous of seeing for myself what local lesion there could be to give rise to such violent symptoms, and especially was I anxious to observe whether or not we had meningitis with effusion, as some assert and others deny its presence in such cases.

Case of Pelvic Abscess. By FRANCIS W. SHERRIFF, M.D., Huntingdon, Quebec.

On the 19th February, 1872, I was called to visit George Malcomb, of Hendersonville, aged 18. His place of residence was ten miles from Huntingdon. Says that about three weeks ago he was wrestling in a blacksmith's shop, and that he was thrown and twisted round, striking an iron plough with his back, and severely injuring his knee-joint. He felt no bad effects at the time from the fall, except in his joint, which rendered him lame, and that he had drawn several cords of wood since his accident. About a fortnight ago he began to complain of pains in his hypogastrium, and was confined to bed. Had been seen by two medical men, but was always growing worse. Complains now of severe pain in his hypogastrium, accompanied with hiccough and vomiting. States that for several days he has had no passage from his bowels, and

makes water frequently and in very small quantities at a time. I now examined the abdomen, and found the lower part painful on pressure, and swollen as in retention of urine. I introduced a catheter easily, and withdrew only about a teaspoonful of urine. Thinking there might be scybalæ in the colon I now pushed a long flexible tube into the anus, with the intention of giving him an enema. The tube would only go up a short distance when it doubled upon itself. I withdrew it and introduced my finger, and found a soft fluctuating tumour filling the cavity of the pelvis, and pressing upon the bladder and rectum. I at once determined that there must be an abscess, and resolved to open it in the morning. I ordered emollient poultices to be applied over the abdomen, and gave him an opiate. His pulse was 90, of good strength, and his voice good.

20th.—Consulted with Dr. Cameron of this place, and he fully agreed with me as to the necessity of immediately opening the abscess by the rectum. I accordingly introduced along my finger a grooved exploring needle, and pierced the tumour two and a half inches from the anus. Instantly, thin, fœtid pus began to run off freely. Fearing that the opening I had made was not large enough, punctured the swelling with a large trochar. About a saucerful only, escaped. The lad became very pale and very cold, and it was some time before he recovered his strength. He had passed a pint of urine altogether since I had seen him the day before. I had desired him to make water into one vessel, and keep it, so that I might ascertain the quantity. Continue the anodynes and poultices.

22nd.—Feels better; the abscess has discharged freely; can now retain his urine for the usual time, and has had a stool; pulse 85; tongue furred; eats little; has slept well; has no pain; gave him an enema with long tube, which I introduced eight inches; can still feel the swelling in the rectum with my finger. Gave him a zinc and carbolic acid wash, to be injected into the rectum twice a day; also, two half grain podophyllin pills, and extract hyosciamus.

24th.—Has had rigors; pulse 75; cannot pass his urine; has pain and swelling in his hypogastrium. Gave him a turpentine enema with long tube, and afterwards pressed away his urine by his hand. Visited him every day, and was always able to empty my bladder by hand pressure until the 28th, when I used a catheter and removed a quart of yellow offensive urine, which gave him much relief.

29th.—Again used catheter and removed about the same as yesterday. For the last three days he has been taking iodide of

iron and quinine, and also pancreatic emulsion in milk. This latter constituted his whole food, as he would eat nothing.

1st March.– Had to visit him during the night to draw off his water, and again in the evening. In my last visit I showed him how to use an elastic catheter himself, and I may here add that he was under the necessity of using it until the 13th April. He also, to-day, began to complain of pain in his hip, and on examination there was much appearance of inflammation and hardness. Medicines and wash were continued. with the addition of opium suppositories introduced into the anus. Poultices to swelling.

2nd.—Abdomen tympanitic; pulse 100; temperature 100; swelling in nates more prominent. Continue the poultices.

3rd.—Saw him at 2 p.m. and opened abscess on hip. A large quantity of thin fœtid pus was discharged. accompanied with gas, which showed that it communicated with the rectum. Gave him a turpentine enema, which caused great discharge of fœces and gas. The tympanitic swelling was immediately relieved. Pulse 120; countenance pale and haggard. Medicines continued.

8th.—From inclemency of weather I have only visited my patient once since last record. Found him very feeble; pulse 111. I found respiration rapid; bowels regular, and discharging matter freely. Removed a large mass of dead fascia from wound, and connected it with another opening which had formed since last visit. Has hectic fever, with perspiration. Continued the medicines, with opium pills internally. Wounds to be washed regularly with red-wash and carbolic acid. Ordered oysters and porter in addition to his regular diet.

9th.—Was visited by Dr. C. Marshall, who reported that he had to remove more dead fascia. Pulse 132; temperature clean; abdomen tympanitic; relishes the porter, and had slept well from the opium.

11th.—Saw him yesterday and to-day. Pulse 90; wound has a more healthy appearance; bowels tympanitic; urine scanty and red.

I may here mention that since the opening in the hip was made, fœces, air and injections have passed freely through, and continued to do so until the opening contracted.

12th, 14th and 16th.—Saw him on each of these days. Bowels continued tympanitic. Enemas were given with long tube, which brought away hardened fœces. Pulse 90; tongue clean. Appetite improved. Continued to use quinine, &c., and opium suppositories.

18th.—Examined per anum and found internal opening about two inches upwards. Passed his urine once naturally.

23rd.—Still improving. Continue the opium, wash and quinine.

27th.—Wound on hip has been discharging masses of fœtid stuff like decayed fascia. Pulse 100; emaciation increasing; feels better, and appetite improving.

April 5th.—Has been seen by Dr. J. Morrison and myself three times since the 27th. Looks better, and has the appearance of having gained weight. Has no control over his sphincter ani, and consequently passes his stools involuntarily. Has discharged a large quantity of pus along with his urine, more particularly if his bowels are opened at the same time. Has little pain on pressure. Tongue clean; pulse 78. Wound much lessened In size. Gave him Infusion Matico with Nitromur Acid. Opium continued both by mouth and anus; also, the wash to wound.

10th, 13th and 16th.—Was visited by Dr. J. Morrison or myself in these days. Very ill on the 10th from eating raw apples and drinking buttermilk. Still improving. Has ceased to use catheter. Bowels rather confined. Gave him the following pill with decided advantage: Podophyllin, gr. iv.; Sulph. Quinine, gr. xvi.; Ext. Hyoscyami, ℈i., ft. pil. n°., xxiv.; one three times daily.

19th.—Looks and feels better. Eats well. Stools still involuntary. Wound on hip much better and still discharges pus.

25th, 30th and May 6th.—Continues to improve. No pus passing now with urine.

May 13th.—Still improving. Goes outside. Fistula nearly closed. Pus still discharged per anum. Pulse 98. Has good appetite. Prescribed Citrate of Iron and Strychnine. Wash to be injected into fistula.

18th.—Visited my patient, accompanied by Drs. Morrison and Marshall, with the intention of cutting the fistula. After putting him under the influence of chloroform I introduced a director the full length into the sinus, and, with my finger in the rectum, failed to discover an internal communication. With a blunt probe I tried to discover an opening nearer the anus, but could not. I now desisted and directed the wash to be continued, and the iron and strychnine mixture.

He was seen on the 2·th for the last time as a patient, and was then improving rapidly. I did not see him from that time until July, when I made a careful examination and found that the sinus had healed up firmly, and that he had recovered the power of the sphincter ani, and could now retain his fœces. He has now gained flesh and strength, and has been able to do his share of road work. I may mention that during his long and painful illness he has not used more stimulants than about one pint of brandy and two bottles of porter.

The distance travelled by Dr. Morrison and myself in visiting this patient amounts to 7 0 miles.

Hospital Reports.

Medical and Surgical Cases Occurring in the Practice of the Montreal General Hospital.

Case of Idiopathic Tetanus. Under the Care of Dr. Drake. Reported by Mr. H. W. Hockridge.

June 25th, 1872.—E. A., Canadian, aged 17, admitted into the Montreal General Hospital at 9 a.m. Patient is a sewing girl and, according to her statement, has "always been rather weak and delicate"; also thinks she has been nervous; but previous to this has enjoyed her usual standard of health. The menses did not appear until she was over sixteen, but received no medical attendance, and has never taken any medicine, other than slight aperients occasionally. Her father, an Irish Protestant, is a strong, healthy man; her mother, a Canadian, but of German descent, died about six years ago of cancer. She recollects no injury, recent or otherwise; none of the family were ever similarly affected; she has never been exposed to the heat of the sun, or to any sudden vicissitudes of temperature; patient appeared to have been a girl of very reserve temperament, caring little for society, but fond of the pursuit of light literature; as far as could be ascertained she has always been perfectly moral in her habits; she was taken yesterday morning with severe choking pain in the throat, headache, and stiffness of the neck and jaws, accompanied by inability to swallow; she went to work as usual but returned during the day; this morning she visited Dr. Drake, who immediately diagnosed the case and sent her to the hospital; on admission she could move her jaw very slightly, but was unable to swallow; during a spasm there was great rigidity of the muscles of the neck; the sterno-mastoids and masseters were strongly contracted; muscles of the abdomen contracted and very tense; angles of the mouth elevated; brows corrugated; alæ nasi contracted, giving an expression of frown to the countenance; trismus and risus sardonicus were well marked; muscles of the extremities perfectly flaccid.

1:30 p.m., pulse 106, regular and full; temperature 99 4-5°, in left axilla. 1:50 p.m., ordered an injection, per rectum, of four ounces beef juice every hour, with ʒj. Chloral every two hours, and to have Ext. Belladonnæ plaster to the spine, with an ice bag

over it. 2 p.m., application of the ice produced several spasms. 2:30 p.m., frequent spasms, biting her tongue very often; kept the handle of a knife between her teeth to prevent it. 3 p.m., had an injection of four ounces beef juice, which was followed by several spasms, after which she fell asleep. 3:30, sleeping soundly. 4 p.m., pulse 96; temperature 97 2-5 ⊂; had another injection of four ounces Beef Juice and ʒj. Chloral; slight spasms. 4:30 p.m., sleeping; roused at intervals by minor spasms. 5 p.m., awake; says her throat is a little better; can now swallow a little Beef Juice with comparative ease; had another enema of four ounces beef juice and fell asleep. 5.30, sleeping; respirations abdominal, 40 per minute; considerable opisthotonus. 6 p.m., pulse 90, regular; temperature 97 ⊂; injection of four ounces Beef Juice and ʒss. Chloral, which produced severe spasms. 7 p.m., had another injection of four ounces beef juice, with ʒss. Chloral; any attempt to move or disturb her in any way is accompanied by very severe spasms; does not retain the whole of the injection. 7:30, sleeping soundly. 8 p.m., pulse 98; temperature 97 4-5 ⊂; sleeping; no spasms for the last half hour. 8:45 p.m., slight spasms. 9 p.m., had another injection of four ounces beef juice and ʒss. Chloral, but did not retain more than half of it; thoroughly under the influence of chloral; has severe spasms when roused; visited by Dr. Drake, who ordered the next ʒss. dose of Chloral to be omitted if she slept, and appeared well under its influence; has had no fœcal motion of the bowels since her admission nor passed any urine. 10 p.m., sleeping soundly; pulse, 78; temperature 97 2-5. Dr. Chipman, Assistant House Surgeon, passed the catheter and drew off about six ounces of urine; but a severe spasm coming on he desisted, and did not empty the bladder. 11 p m., sleeping still; had no injection at this hour; aroused at intervals by minor spasms. 12 p.m., pulse 90, weaker but regular; temperature, 96 4-5 ⊂; attempted to make an injection of beef juice, but it was immediately rejected. Visited by Dr. Roddick, House Surgeon, who ordered the Chloral to be stopped until 4 a.m.

June 26th, 12:30 a.m.—Changed the ice bag; followed by a few spasms; awake and supped a little beef juice and milk; complains of "a lump" in her throat. 1 a.m., still waking and taking a little beef juice and milk at intervals; swallows pretty well; complains of great thirst, and on taking a little ice water it produces severe spasms, but the same effect is not observed after taking the beef juice or milk; speaks tolerably well, and is perfectly conscious. 2 a.m., pulse 90, weak and regular; temperature 98 2-5 ⊂; sleeping a little, but wakes at intervals in spasms.

3 a.m., waking, but dozing at intervals; spasms less frequent and not so violent; takes half ounce beef juice and milk alternately, every half hour, without much difficulty; talking freely, and seems a litte better. 4 a.m., pulse as before; temperature 98 4-5 ⊂; took ʒss. Chloral by the mouth; dozing a little for the last half hour. 4:10 a.m., fell asleep. 5 a.m., sleeping soundly. 6 a.m., sleeping; had one considerable spasm this last hour; pulse 90: temperature 98 1-5 ⊂. 7 a.m., sleeping still; has had no spasm for the last hour; Opisthotonus not so marked. 8 a.m., awoke; took some beef juice and milk; complains of pain in the heart, and over the region of the sternum: says the "lump in her throat is not gone"; few minor spasms; pulse and temperature as before. 9 a.m., sleeping soundly. 9:55, violent spasm; renewed the ice-bag, which roused her; took half ounce beef juice; asks for milk; gave her milk with ice, which she swallowed pretty easily. 10 a.m., pulse as before: temperature 98 ⊂; considerable minor spasms; speaks a little at intervals; says "the knife between her teeth is too thick"; Opisthotonus not so marked; frequent minor spasms until 10 30, after which she slept until 11 o'clock: tongue dry. 11 a.m., pulse 92; temperature 98½ ⊂; frequent spasms; tried to swallow some milk but could not. 11:30 a.m., took a little milk and beef juice; violent spasm! frequent minor spasms until noon. At noon, pulse and temperature as before: small spasms. Visited by Dr. Drake who ordered—

℞. Chloral, ʒij.
Syr. Tolut., ℥iss.
Aquæ ad., ʒij.
Tablespoonful every four hours.

12:30 p.m., violent spasms; 12:40, took some milk and beef juice, which was followed by a violent spasm; removed the ice bag. 12:50 a.m., slept till 1:20, when she was roused by a spasm; renewed the ice bag, which caused a violent spasm; marked opisthotonus. 1:30 p.m., took her medicine; small spasms. 1:40 p.m., sleeping. 2 p.m., pulse 90; temperature 99 1-5 ⊂; sleeping still; no spasms. 3 p.m., sleeping; two slight spasms, followed by one very severe; respirations abdominal. 4 p.m., pulse as before; temperature, 98 ⊂; awoke and took some beef juice and milk. 4:15, slight spasms. 5 p.m., waking; talks tolerably well; complains of pain in her heart and throat; spasms not so frequent and violent for the last hour. 6 p.m., pulse and temperature as before; took her medicine, which was followed by violent spasms: marked opisthotonus; changed the ice bag, which produced a severe spasm; if her tongue be touched by anything it is immediately followed by a temporary spasm. 6:30 p.m., visited by Dr.

Drake, who ordered her medicine to be taken every three hours, and to take all the nourishment she could. 7 p.m., sleeping; aroused immediately by small spasms. 8 p.m., awoke and asked the nurse to take her to the closet; lifted her on the night chair; she had no stool, but passed a little urine. 9 p.m., took her medicine, followed by a violent spasm; complains of her legs getting stiff; marked opistholonus. 9.30 p.m., sleeping; small spams at intervals. 10 p.m., pulse 90, regular but weak; temperature 97 ⊃; sleeping; aroused at intervals by severe spasms. 11 p.m.; visited by Dr. Roddick, House Surgeon, who ordered her an enema of a pint of soap and water, and as she was sleeping soundly, and appeared thoroughly under the influence of Chloral, he considered it judicious to omit the next dose. 11:45 p.m., severe spasm. 12 p.m., pulse 96; temperature 97 4-5 ⊃; tongue dry; sleeping; roused by frequent spasms, which are more severe than before. 12:15 p.m., severe spasm; very marked opisthotonus.

June 27th, 1 a.m., very severe spasm; noticed that the spasms are decidedly more violent and prolonged. 1:30 a.m., violent spasms. 2 a.m., pulse 102—weak; temperature 99; violent and prolonged spasms; complains that she wants to cough, but cannot. 3 a.m., pulse 108; temperature 99 2-5; frequent and severe spasms; skin hot and covered with perspiration; at the termination of the spasms patient seems exhausted. 3:30 a.m., sleeping a little at intervals.

4 a.m, pulse 120; temperature 99 4-5 ⊃. 4:10 a.m., had the most violent and prolonged convulsion that she has had up to this time; features were excessively distorted; both eyes strabismised; right, externally upwards and outwards; left, upwards and inwards; countenance very livid during the spasm, assuming a pale, purplish tint towards the end; jaw firmly clinched; extremities remarkably stiff and rigid; muscles of the abdomen excessively tense, and felt like a piece of board; opisthotonus never more marked since her admission; patient almost literally resting on her head and heels; she was for fifteen seconds without a respiration; pulse was imperceptible; thought she was "going," and sent the nurse for Dr. Roddick, House Surgeon, but she was scarcely out of the ward when the heart's action was again apparent, and when the Dr. came she was partially revived, though extremely weak and exhausted; Dr. Roddick immediately ordered an enema of four ounces beef juice, with one-half ounce brandy, and to have a mustard sinapism applied to the chest for half an hour, and also to take ʒss. Chloral.

4:20 a.m., pulse uncountable; temperature 102 4-5 ⊃; respirations abdominal—67 per minute; skin covered with perspiration.

4:30 a.m., had another fearful aonvulsion of the same character as the preceding. 4:45 a.m., part of the injection came away; sleeping. 5 a.m., sleeping still; pulse 140—small and irregnlar; temperature 102°; respirations 60 per minute; feet feeling cold; countenance blanched. 5.30 a.m., pulse 132—weak and irregular; temperature 100 3 5°; had another extremely violent convulsion, similar to the former. 5:40 a.m., took a teaspoonful of brandy; at the end of the spasms patient is excessively weak and exhausted; she speaks a little at times, and has perfect consciousness; injection coming away. 6 a.m., pulse 140; temperature 101°; another awful convulsion, accompanied by the same phenomena as the three preceding; this is the fourth violent spasm since 4 a.m. 7 a.m., pulse as before; temperature 101 4-5°; sleeping at intervals; occasional minor spasms. 8 a.m., pulse 138; temperature 101 1-5°; small spasms at times; took a little beef juice and milk; patient is very weak and depressed; says, "I'll never get over it." 9 a.m., pulse 132; temperature 100 1-5°; a slight spasm. 9:15 a.m., Dr. Boddick ordered her ʒss. Chloral. 9.45 a.m., sleeping; roused occasionally by minor spasms. 10 a.m., temperature 102°; pulse 128; calm sleep; minor spasms at intervals; respiration abdominal—44 per minute. 10:30 a.m., slight spasms. 10:40 a.m., took a little milk. which was followed by a temporary spasm; slight moisture on the hands and upper extremities; feet warm. 11 a.m., occasional spasms; temperature 102°; pulse 124; sleeps calmly until noon.

Noon, pulse 120; temperature 101°; swallowed two tablespoonsful of milk tolerably well. 12:30 p.m., several spasms of a mild character. 12:45 p.m., took a little milk. 1 p.m., pulse as before; temperature 100 4 5°. 1:10 p m., strong spasm. 1:20 p.m., swallowed a tablespoonful of milk. 1:30 p.m., took ʒss. Chloral, and three tablespoonsful of milk, followed by three small spasms. 1:45 p.m., very violent spasm; countenance livid; spasms are assuming a jerking or hiccoughing character. 2 p.m., violent and prolonged spasm, accompanied by an appearance of choking; pulse 120; temperature 100 2-6; marked opisthotonus. 2:20-30 p.m., several severe spasms; crying; breathing laboured, accompanied by a peculiar moan. 2:50 p.m., severe spasm, in which patient doubled her right leg back on her thigh; respirations 44 per minute, followed by a jerk at the end of each. 3 p.m., pulse 108; temperature, 100 2-5°; sleeping. 3:15 p.m., violent spasm. 3:20 p.m., another strong spasm; tried to swallow some milk but could not. 3:30 p.m., violent spasm. This forenoon she has complained frequently of pain in her heart, at the same time passing her hand over the exact situation of the heart. 4 p.m., pulse 120,

weak and irregularly intermittent: temperature 100 1-5 ℃; visited by Drs. Drake and Roddick, who, on learning that she took so little nourishment, and did not retain the injections, suggested feeding her through the nose. Dr. Drake took a gum-elastic catheter and introduced it through the posterior uares, into the œsophagus. Dr. Roddick keeping her jaws apart by means of a knife-handle: but before he succeeded she took a very severe spasm, so that the Dr. was obliged to withdraw the catheter. Dr. Drake considered the convulsion so violent in character as to render this method of supplying her with nourishment impossible. This spasm was precisely similar in character to the one she had at 4 o'clock this morning: the patient being, as on that occasion, from 15 to 20 seconds without a respiration. 4:30 p.m., patient partially recovered from the spasm, though excessively weak and exhausted: gave her a teaspoonful of brandy and beef juice. 5 p.m., ordered a hypodermic injection of 1-50 gr. Atropine, and to take grs. v. Sulph. Quinine in Syr. ℥i., every four hours: removed the ice-bag. 5 30 p.m., gave her grs. v. Syr. Quinine, which produced a few minor spasms: patient is perfectly conscious: speaks a little occasionally; recognized her friends and asked for an apple: face is now flushed; renewed the ice-bag. 6 p.m., pulse 144; temperature 101 2-5 ℃; face flushed: sleeping a little at intervals; slight spasms. 6:45 p.m., a violent spasm; pulse as before; temperature 102 ℃. 7:15 p.m., four very violent convulsions immediately succeeding one another; examined by Dr. Roddick, who pronounced the bronchial tubes gorged with mucus; patient exhausted; respirations abdominal—54 per minute. 7:45 p.m., slight spasms occasionally; sleeping. 8 p.m., pulse 160; temperature 102 2-5 ℃; sleeping still. 8:25 p.m., changed the ice-bag; slight spasms. 8:40 p.m., took a little milk; breathing with a moan. 8:50 p.m., swallowed a teaspoonful of brandy; violent spasms; respirations 54 per minute. 8:55 p.m., pulse 1:6; temperature 101 2-5 ℃; small spasms. 9 30 p.m., had the hypodermic injection of 1-50 gr. Atropine. 9:55 p.m., took a little sip of Quin. Sulp., grs. v., in Syrup. ℥j.; this was followed by a very violent spasm; both eyes strabismised: right externally upwards and outwards: two minutes livid countenance: pulse perceptible though it could not be counted; very marked opisthotonus; eleven minutes after the spasm her pulse could not be counted; temperature 103 ℃. 10:25 p.m., had an injection of four ounces beef juice, with one ounce brandy: pulse 116. 10:35 p.m., minor spasms; swallowed a little beef juice. 10:40 p.m., perfectly conscious and speaks a little: heard the hospital door-bell ring; says, "there's the bell for dinner." 10:45 p.m., spasms: sleeps until

11:15; two violent spasms; pulse gone: then uncountable: temperature after spasm 101 3-5 ⊃; part of injection came away. 11:30 p.m., remainder of injection came away; three very sudden and jerking spasms: pulse 120. This day ends by five severe spasms of a jerking or hiccoughing character.

June 28th, 5 minutes past midnight.—Six successive spasms: three spasms suddenly and in immediate succession; she called for water; gave her a few sips; then five severe momentary spasms immediately followed. 12:20 a.m., pulse as before; temperature 101 3-5 ⊃; frequent and violent spasms. 12:40 a.m., six severe spasms in succession. 12:55 a.m., three violent spasms. 1 a.m., several violent spasms in immediate succession: hypodermic injection of 1-50 gr. Atropine, followed by several severe spasms: pulse 130: temperature 103 2-5 ⊃. 1:15 a.m., continual and rapid succession of severe spasms; there were two or three minutes interfollowed by six or seven severe and prolonged spasms, without any interval until 2 a.m., pulse as before, very thready: temperature 103 1-5 ⊃: continued severe and prolonged spasms every two or three minutes. 3 a.m., pulse imperceptible: temperature 103 2-5 ⊃; continued spasms of the violent type before mentioned. 3:30 a.m., pulse perceptible and upwards of 160. 4:30 a.m., had an injection of 4 ounces beef juice, with 1 ounce brandy, which was followed by a violent jerking spasm: strabismus, right eye external upwards: twenty seconds without a respiration; pulse imperceptible. 4:40 a.m., frequent violent jerking spasms, with hissing through her teeth: said, "I'm going." 4:50 a.m., another violent convulsion, with strabismus as before: continual succession of short hiccoughing spasms until 5 a.m., pulse 150: temperature 103 ⊃. 5:25 a.m., after a prolonged continuance of short, jerking spasms, followed another fearful convulsion, characterized by all the phenomena of the preceding, though, perhaps, to a more intense degree; called for ginger ale and beer; very marked opisthotonus. 5:30 a.m., continued heavy, short jerks, with heavy breathing. 5:50 a.m., another severe spasm: upper and lower extremities both extended to the utmost: Opisthotonus never more marked; patient raised her trunk quite up from the bed, supporting herself on her extremities. Gave her a teaspoonful of beef juice to moisten her mouth, which produced a spasm. Patient is perfectly conscious; says, "I'll never get over it." 6 a.m., temperature 101 ⊃; pulse not countable: continual jerking, moaning spasms; severe hiccoughing spasms every two or three seconds; asked for water; gave her a few sips, which brought on a severe hiccoughing spasm. 6:30 a.m., patient seems exhausted by the frequency and violence of the spasms: surface covered with per-

spiration. 7 a.m., spasms for the last half hour have been continued, but less violent in character; subdued moaning breathing; had an hypodermic injection of 1-50 gr. Atropine; pulse a thread; temperature 102 ⊖; short jerking or hiccoughing spasms; breathes with a moan. 7:10 a.m., Opisthotonus very marked. 7:20 a.m., Opisthotonus as before; the jerking, hiccoughing breathing continued. 7:45 a.m., moaning; patient is perfectly sensible. 8 a.m., temperature 105 4-5 ⊖; respirations very gentle and subdued; there is no hiccoughing or jerking; countenance pale, but placid and serene to look on; continued until 8:10 a.m., when death terminated the scene; pupils dilated. 9:45 a.m., temperature 101 ⊖. 10:55 a.m., temperature 100¾ ⊖.

At her bedside it was stated by one of her friends, that about two weeks ago she was returning home from work one evening, when it came on to rain very heavily, and wearing a new hat, that she did not wish to get spoiled, took it off and carried it under her cloak; got a thorough drenching, from which she caught a severe cold, and has not been well since. Why the patient refused to give this information on her admission is something very strange and unaccountable, and seems to throw some doubt on the validity of the assertion; inasmuch as it is not easy to conceive what legitimate reason she could have for concealment; but since it has been proved that some parts of her statement deviated very materially from what was really the case, we cannot, in this particular instance, adhere closely to her testimony.

"SECTIO CADAVERIS" SEVEN HOURS AFTER DEATH.

June 28th, 3 p.m.—Removed the Spinous processes of the Vertebral Column; found blood fluid all through; muscles of the back infiltrated with blood; Opisthotonus well marked, toes turned in; great effusion of blood between the bone and Dura Mater in the Vertebral Column.

Removed the Brain and Spinal Cord down to Cauda Equina; on removing the Calvarium there was nothing particular to notice; the Dura Mater appeared healthy; veins were very full; great number of Pacchionian bodies along the Longitudinal Fissure; the Arachnoid presented an opaque, milky appearance, which extended from one convolution to another; the veins were injected.

Surface of the Brain presented, generally, a healthy appearance: Puncta Vasculosa were more than usually numerous.

Interior of the Brain.—Brain substance was found to be firm and healthy on dissection; the Left Ventricle was found empty; the Choroid Plexus and Corpus Striatum healthy; of the Thalamus Opticus and Right Lateral Ventricle there was nothing to remark; Fifth Ventricle was small.

Veluminterpositum healthy; brain sections were healthy every way: the vessels on the floor of the Fourth Ventricle were injected.

Spinal Cord.—

Sectio Thoracis.—On opening the Thorax the Pericardium was found to contain about ʒiss. of fluid. In the external edge of the Lower Lobe of the Right Lung was discovered a hard nodule, with softening in the centre, containing a purulent deposit. The Pleura was covered, externally, with numerous little patches of fibrinous effusion, which could be scraped off by the finger nail. It was also dotted over with what appeared to be light-colored lymph. The Right Lung was partially emphysematous. A similar nodule to that found in the Right Lung was discovered in the Upper Lobe of the Left Lung.

Heart.—Right side, Ante-Mortem clot. A quantity of light-colored lymph, devoid of color in the centre, was found extending along the Pulmonary Artery. The Tricuspid and Semilunar valves were perfectly healthy. Left side, Post-Mortem clot. Firmly contracted, empty and perfectly healthy.

Uterus.—Normal.

Ovaries.—Congested; containing a large number of small cysts. Cystic disease of both right and left ovaries.

Liver, Kidney and Spleen.—Healthy; normal.

Syphilitic Ecthyma--Rapid Cure under Large Doses of Iodide of Potassium. Under care of Dr. D. C. MacCallum. Reported by Mr. D. Carmichael.

B. M., aged thirty-five, country—Ireland, was admitted to the Montreal General Hospital on the 5th July, 1872, suffering from an ecthymatous ulcer, situated on the inner ankle, near the inner mallelous of the left leg.

History.—Is a married woman and the mother of seven children; has always enjoyed good health, until about one year and four months ago; at that time she became pregnant, and during the first month of her pregnance an eruption made its appearance on her legs and thighs, evidently syphilitic in character, as she mentions that she contracted chancre from her husband. She remained pregnant for six months, when she miscarried. She states that the child was dead, and appeared as if putrid from disease. After she had recovered from her miscarriage she went under treatment for the eruption, which had been gradually growing worse, and an ulcer appearing on the inner side of the left ankle for the first time. The treatment was continued till the eruption had disap-

peared and the ulcer healed. She continued well for some time, and on the 25th March, 1872, was admitted to hospital, the eruption and ulcer having again appeared in the same situation as before, and being considerably worse in character. Under treatment she recovered in about four weeks, and was discharged from the hospital on the 4th May, 1872. In about a week or ten days after her discharge from hospital the eruption appeared again. This time she went under treatment of a physician. Little benefit was derived, and on the 5th July, 1872, she was again admitted to hospital.

July 14th.—*Present Condition.*—General surface of the body is pale, and suggests a condition of anæmia, but she complains of nothing except an ulcer situated on the inner mallelous of the left ankle, which presents the following characters :

It is reinform in outline ; as large in character as a cent piece ; unhealthy looking towards the centre, this part being occupied by a large, greyish white deposit, which occupies the greater part of its surface, and around the margin of this patch some unhealthy granulations are seen springing up ; towards the edge of the ulcer it presents a more healthy appearance, the granulations being small, firm and bright red color, and the periphery is surrounded by a margin of healthy looking, new skin. Above the inner malleolous, and on the inner side of the ankle, also, are numerous pustular looking spots, bluish in appearance, and a scab covering the surface of some of them. She mentions that they fill with matter, then burst ; an eschar forms ; this is shed and the surface left, ulcerates. Scattered all over the lower extremities are numerous coppery-hued spots, but they do not take on an ecthymatous action.

Ordered Pot. Iod. grs. x., every four hours. Lotio Nigra, to be applied to the ulcer with lint.

July 15th.—Condition much the same ; ulcer is improving in appearance, and the pellicle of new skin around the periphery is extending, and the cavity of the ulcer is contracting.

July 18th.—Has been in much the same condition for the past three days, but is improving ; complains of pain beneath the right nipple, but it was only transitory, nothing abnormal being detected ; ulcer looks smaller and more healthy looking. She continues on the Potas. Iod. and Lotio Nigra.

July 21st.—Ulcer is healing rapidly, and at least half of its surface is closed ; a blackish looking pellicle covers the healed surface, and the edges are bordered by healthy looking, new skin ; general health good.

July 24th.—Ulcer still continues to make good progress, and the

greater part of the surface is healed, the blackish looking pellicle still occupying the central portion.

July 27th.—Ulcer almost entirely healed, with the exception of a small portion, not much larger than a pea; general health good, but complains of weakness.

July 30th.—Discharged from hospital cured.

Severe Punctured Wound from a Bowie-Knife, extending into the Pelvis, and separating the Coccyx from the Sacrum—Sloughing of cellular tissue along the track of the wound—Recovery. Under the care of Dr. D. C. MacCallum. Reported by Mr. James C. Cameron.

J. C., aged 17, was admitted to the Montreal General Hospital June 29th, 1872.

Condition.—He was brought to the hospital about 4 o'clock in the afternoon, under the influence of liquor, and bleeding profusely from a wound produced by a bowie-knife in the hands of an Italian pedlar. Upon examination, a wound was found in the fissure of the nates, running transversely, about three inches in length, and so deep as to allow the finger to be introduced its full length into it. The wound was directed forwards and upwards, indicating that the course of the knife was from below upwards; and upon further examination the coccyx was found to be completely severed from the sacrum, and hanging loose in the pelvic cavity. The alarming hæmorrhage proceeded from an artery of considerable size, the bleeding being sufficient to saturate all his clothing from that part down. The pulse was rapid and weak, probably from loss of blood.

Treatment.—The edges of the wound were brought together by three silver sutures carried as deep as possible through the soft parts, so as to bring the lower edges of the wound together. Cold applications of ice externally. Internally, wine, beef-tea and milk liberally.

This treatment was continued for several days with a view of supporting his strength and keeping down inflammation.

July 3d.—On making the daily visit the patient was found to be much worse, complaining of severe pain in the abdomen; slight pressure did not cause much uneasiness; but, upon firm and deep pressure being made, he complained loudly, and referred the pain to the lower part of the abdomen; so much so, that it was feared that inflammatory action was being set up in the pelvic cavity; the bladder was much distended, and it was found necessary to draw off his urine; the pulse was then 110; temperature in axilla 101 °;

poultices were ordered over the abdomen, and medicated with Carbolic Acid over the wound; internally, Pulv. Doveri, grs. v., Hydrarg Amm. Chl., grs. iij. To be repeated every four hours.

July 24th.—Urine drawn off again last night and this morning; there was considerable difficulty in passing the catheter; parts tender; obtained great relief from the poultices; is quite feverish and weak; great tenderness on deep pressure; pulse 92; temperature in the axilla 102 1-5 °.

July 11th.—Under treatment, he seemed to be gradually gaining, and the symptoms of pelvic complications disappearing; the temperature came down to 100 °, and the pulse to 90; but to-day there was a marked change for the worse, so that at 8:30 p.m. his pulse was 130 and the temperature 105 1-5 °; the heat of surface was intense, dry and pungent; great restlessness; is in a semi-conscious state, wandering and delirious; the symptoms were so alarming that it was thought necessary to have his deposition taken; he was given large doses of Liquor Ammon. Acetatis and stimulants. In about an hour after the administration of the Ammonia he was found bathed in a profuse perspiration, and felt somewhat easier. Beef-tea, milk and wine were given regularly at night.

July 12th.—The alarming symptoms of last night have abated, and he feels somewhat better; pulse 110; temperature 101 4-5 °; shewing a fall in temperature of 3 2-5 ° in 12 hours. He was ordered to-day, Pulv. Dover, grs. x., every 4 hours; poulticing the wound to be discontinued, and, instead, Carbolic Acid dressings, with an injection of Carbolic Acid Wash, 1 x 30, into the wound twice a day. At 8 p.m. pulse 120; temperature 102 1-5 °.

July 16th.—Has gradually improved; takes nourishment well; temperature has ranged from 101 to 102 1-5 °, and the pulse from 100 to 120.

July 31st.—Very much improved; the wound is granulating nicely; Carbolic Acid dressings discontinued; Red Wash substituted.

August 4th.—Discharged, quite recovered. It may be mentioned that some difficulty was experienced in keeping his bowels regular. Owing to the peculiar situation of the injury, any straining was extremely painful, and even the passage of the fœcal matter, almost without effort, was attended with considerable uneasiness. The pus, which was discharged from the wound in large quantity, was peculiarly fœtid and disagreeable.

Amyloid Degeneration of the Kidneys—Pleurisy—Epistaxis—Œdema of the Lungs—Ammonœmia—Death. Under the care of Dr. D. C. MacCallum. Reported by Mr. Henry Brown.

J. M., a well-developed young Irishman, aged 28, was admitted into the Montreal General Hospital on the 8th July, 1872, under the care of Dr. McCallum, with well marked symptoms of Chronic Bright's disease. He had been employed on a canal boat, and had been occasionally exposed to the cold; also, habitually using spirits, but not a hard drinker. On the 8th of May he was seized with pain in the stomach and loins; at the same time he noticed that his abdomen was swollen. Three days after the œdema shifted to the legs, arms and face, and about the 15th June his eyesight began to fail, and continued until the 8th July, when he could not read the largest print; his urine diminished in amount; at the same time he increased in weight some twenty pounds in two months. His previous history was that of health, with the exception of a slight gonorrhœa in Europe, and yellow fever in the West Indies, in July, 1869. Being admitted, his urine was examined and found to contain a large amount of albumen, sp. gr. 1,005, quantity normal and pale yellow. He had, also, a mitral systolic murmur and percussion showed hypertrophy of the left ventricle. He was ordered Tinct. Ferri. Mur., ʒij.; Liq. Amm. Acet., ℥ij., Aq. ad., ℥vi. a tablespoonful every four hours, and 1 oz. gin.

10th —His urine was examined again and found to contain uro-Hæmatin and fibrinous casts of the uriniferous tubes; the patient is very restless and cannot sleep; œdema shifts from face and upper extremities to scrotum and lower extremities; bowels constipated, and he appears much excited; pulse 96.

12th.—Urine diminished in quantity; sp. gr. 1,005; no change in quantity of albumen; the patient is very restless and cannot be kept in bed.

14th.—Bowels more regular; the scrotum and lower extremities very much swollen, and he vomits his food and medicine; pulse 100; distressing dyspnœa, and much excited.

15th.—More restless; cannot sleep; he remains out of bed; urine scanty, and no desire to micturate; sp. gr. 1,005; pulse 102, and no change in quantity of albumen.

16th.—Active delirium; wants to leave the hospital, and persists in sitting on the floor; bowels regular; pulse 108.

17th.—He was seized about 8 o'clock this morning with a violent pain in the right side, below the nipple; on being examined it was found that he had well marked symptoms of pleurisy; friction sounds plainly heard. He was ordered mustard sinapism to

be applied over the right side, and the following prescription: Liq. Amm. Acet. ℥iij., Aq. ad. ℥vi., ℥ss. Ter. die., also Pulv. Dover grs v., every 4 hours.

At 12 o'clock he had a convulsion which lasted thirty seconds; pulse 144; the pain in the chest continued throughout the afternoon and night, with dull, frontal headache and thirst.

18th.—This morning the patient is bathed in perspiration; urine slightly diminished in amount, and amber tint; sp. gr. 1,006; he feels easier, and vomiting ceased.

19th.—Œdema of both lungs, with bubbling rales; pulse 155; Œdema of scrotum diminished; urine examined again with microscope and found to contain crystals of triple phosphate and granular tube casts.

20th.—He rested very well through the night, and slept at times; less pain in right side, and friction sounds not so well marked; breathing freely and not so much excited; he has a slight attack of diarrhœa, and was ordered Pulv. Cretæ Co.

21st.—Diarrhœa stopped and Pulv. Cretæ Co. discontinued.

22nd.—Epistaxis, with considerable loss of blood; Liq. Ammon. Acet. stopped and Gallic Acid given in gr. xj. doses every 4 hours.

23d.—He complains of sore mouth and thirst; his tongue is dry, cracked and of a dark brown colour; his breath was examined by moistening a glass slide with Hydrachloric Acid and making him breathe on it for some minutes; crystals of Hydrochlorate of Ammonia were found when the slide was placed under the microscope.

25th.—He had another attack of epistaxis; Gallic Acid continued until 28th.

August 1st.—He is very weak and stupid, and refuses to take nourishment or medicine: he was ordered Mist. Ferri et Quinæ and persuaded to take it, and was continued until the

5th.—Albumen very much diminished, and urine contains a large amount of chlorides. On the 5th he had the last attack of epistaxis; his nose was plugged, but he pulled it out as soon as Dr. Roddick left the ward. Gallic Acid was ordered again in gr. vx doses.

8th.—The patient sits in a hooped-up position, and partly comatose; his urine was axamined, and no trace of albumen could be found, but it contained a large amount of chlorides; sp. gr. 1,005, and pearl colour; Œdema slight and limited to the lower extremities; he has been comatose and quite unconscious for the last twenty-four hours. Died on the 10th August.

POST MORTEM APPEARANCES.

Œdema of both lungs; otherwise healthy.

Pericardium.—The membrane has a shaggy appearance from partially organized fibrinous exudation; the surface of the pericardium presents the appearance, when separated, of two ragged surfaces; the contents of the sac has a dark-red colour, giving it a hæmorrhagic appearances.

Heart.—The heart weighs 2 lbs. 6 oz.; its substance is soft and flabby, sodden with serum, and the muscles are discolored; the right ventricle and auricle are very much dilated; the left not so much; but extensive thickening of the walls of the left, being from $\frac{7}{8}$ to $1\frac{1}{4}$ inches thick; the valves were perfect, except a large sized nodule on the ventricular surface of the mitral.

Liver solid and congested.

Kidneys.—Right kidney weighs 6 ozs.; the surface is smooth, with the exception of a few granulations; the substance is of firm consistence, and the tunica albuginea loose and opaque; the cortical portion distinctly yellow and in excess; the pyramids small and charged with small vessels, giving it a reddish colour.

Left Kidney weighs 4 ozs., very firm, and of a dirty yellow colour; on section, the cortical portion is very small, only appears like a border around the pyramids; the surface is covered with granulations, and the tunica albuginea is thick, opaque and closely adherent. On section, both kidneys have a glistening appearance, and Iodine being applied, numerous bright red spots were seen, and on the subsequent addition of sulphuric acid those spots changed to a rusty violet or dark blue colour.

Albuminuria with Anasarca—Complete Disappearance of Both. Under the care of Dr. D. C. MacCallum. Reported by Mr. H. R. Bigelow.

J. McB. entered the Montreal General Hospital July 10th, 1872, with Anasarca and a general appearance of diseased kidney.

Patient stated that he was 50 years old; born in Ireland; came to Canada in 1845; by trade a cabinetmaker; mother died about about five weeks ago of cancer in the breast; father died when patient was quite young; no brothers or sisters; about five days ago, when at work, noticed swelling in hands and feet; never had rheumatism or any serious disease.

On entering the hospital the patient was placed under the care of Dr. McCallum. An examination of the urine showed great deposit of albumen. No abnormal heart sounds or derangement of vision, but well marked œdema of eyes and lower extremities.

The patient was placed on half diet, and Quin. Sulph., gr. j., and Tinc Ferri Mur., m.x., ter die.

July 11th, 12th, 13th, 14th.—Patient manifestly improving.

15th.—Albumen in urine barely appreciable.

16th, 17th, 18th, 19th.—Continued improvement; no Anasarca.

20th.—Sp. grav. of urine 1,012; no trace of albumen; no tube casts; 80 ozs. of urine, of limpid colour, voided in 24 hours; no flatulency or indigestion; pulse normal; a slight pain in back relieved by application of hospital liniment.

21st.—No change.

22nd.—Patient to all appearances well.

23d.—Patient left hospital.

Reviews and Notices of Books.

Spermatorrhœa; its Results and Complications. By J. L. Milton Surgeon to St. John's Hospital for Diseases of the Skin. Enlarged and Reprinted from the Original Papers published in the *Lancet* for 1852, and the *Medical Circular* for 1858. Ninth edition; 8vo., pp. 118. London: Robert Hardwicke, 192 Piccadilly. 1872.

There is no subject so likely to engross attention as that treated of in this little work. The function of generation is of such importance to most men that with many death would be preferable to impotence. It has always been a difficult matter to deal with, the natural repugnance of man to converse on subjects of this nature leading. in a great many instances, to impairment, if not total loss, of the procreative power. It is hard to say what is the duty of parents and teachers in the care and treatment of childhood and youth. It is difficult to determine or to decide how to act; whether to impart to children the knowledge of the procreative act, warning them plainly and honestly of the dangers of departure from virtue's path; or, on the other hand, to allow them to find out for themselves the mystery which puzzles most boys and, we doubt not, girls as well, so that, having no guiding principle of action, they are left to make havock of their future happiness and, perhaps, shorten, by vicious practices too easily acquired, their very lives.

The early impressions of youth become the guiding principles of the future man. He is instructed in his duty toward God and his neighbor, but too often the duty which he owes to his own individual person is a sealed book, to be opened and read with avidity in the many sensational works of the day, or the horribly

obscene books which are perused in secrecy, and which have such a demoralizing tendency.

The work before us treats of Spermatorrhœa as a disease. Some objections have been raised to placing this affection, which in many instances is a symptom of diseased action, under a special heading. To this we may urge that there are no symptoms, properly so called, which have not a defined cause. It is the aim and object of the practice of medicine and surgery to so connect cause with effect that by removing the one the other must cease. It becomes, therefore, a matter of minor importance, a mere play of words, to object to the classification of this affection under the distinctive heading of Spermatorrhœa.

This work consists of three chapters. In the first we have a brief history of the disease, together with an account of the present state of professional opinion on the subject of Spermatorrhæa. In the course of his remarks the author draws attention to the great prevalence of this affection; he says "that the disease "exists to a very great extent, far greater than is generally "thought; that it yearly reduces hundreds, if not thousands, to "impotence and all its attendant ills: hypochondria, weariness of "life, insanity, and so on; that not only every town, but every "village could show victims to this neglected malady, are facts "which, I feel assured, will not be disputed by those who have "looked into the subject."

This being the case, and there are few men who have gone through life with their eyes open will dispute its accuracy, it becomes a question to determine a remedy, not so much for the disease existing, because our art and those who practise it scientifically are capable of affording individual relief, but at the present time preventitive measures are the rule. It is, therefore, the duty of the profession to look the subject fairly and squarely in the face, and not, by a system of false delicacy, abandon the victims of habits formed in early life to their fate.

The author points out that, as a general thing, professional men dislike to treat these cases, and he accounts for this from the fact that sound principles of the pathology and treatment of this affection are neglected in the class-room, so that a large proportion of practitioners are not qualified to afford relief. A most singular announcement is given as a fact, that at a meeting of the Medico-Chirurgical Society of London a statement, that Eunuchs could beget children, was allowed to pass unchallenged. If this statement be true, we must conclude that the phlegmatic Turk has too often been deceived in the keeper of his harem, which may

account, in the days of the past, for the occasional application of the traditional bow-string for apparent minor offences.

In the next chapter we have the pathology of this disease fully discussed. The author divides his subject into three classes, and although he fully recognises those affections of the urethra prostate and bladder, attended with a discharge, as not being true Spermatorrhœa; yet, from the fact that their very existence exerts a disturbing influence, through the mind of the sufferer, on the virile powers, they are all described under one general heading.

In speaking of impotence, the author states "that the function "of generation being the most truly remittent of all we are "acquainted with, being liable to cease for years, or even for life, "without any injury to health, may be supplanted by disordered "innervation of some other part." From this we would infer that the author connects many of the ailments of life with the generative function, regarding the cessation of the latter with the development of the former. This, to our mind, is an error, as we know from observation that many affections of the general health will lessen if it does not entirely obliterate all sexual ability.

The author calls attention to sudden loss of power in persons in whom there exists a tendency to impotence, resulting from very slight causes, such as fractures, attacks of neuralgia, cerebral excitement, and long-continued fatigue. Cases are given in illustration which have come under the author's observation. The histories of these cases have been cut short in order to limit the size of the book.

In chapter third we have very fully discussed the subject of treatment. The author, at the outset, gives four rules which we think are applicable in the treatment of disease generally. He does not venture on any specific for this disorder. After considering various tonics, sedatives, and the remedial means in use in such cases, he passes on to the external applications, as the use of the hip bath, sleeping cool on a hard couch or the floor. He has found it advantageous to insist on light covering, and, although it is not mentioned, we should presume that early hours should be insisted on.

We come now to the mechanical means, such as the introduction of an instrument into the rectum, and worn there, so as to exert pressure on the urethra, and thus prevent the escape of semen. Next we have a collar with four sharp points looking inwards; this is applied before going to bed, and should erection take place the sufferer is awakened by the pricking sensation of the points; or, another on the same principle, but consisting of a double row of teeth, which lie flat in quiescence, but during dis-

tension of the ring the sharp edges are brought in uncomfortable juxtaposition with the erect organ.

This reminds us of a half cracked friend whom we knew a few years ago, who, from religious austerity, imagined it was a sin to suffer an erection even during sleep. He had a tin receptacle made, with a sharp rim looking inwards. This, he nightly placed on his erring bit of flesh and chained it to his thigh. It resulted in the formation of an ulcer near the root of his penis which took some time to heal. We cannot see the advantage of these means of cure, and should fancy that the mere fact of any application of the kind would rather tend to induce an erection than otherwise.

Another somewhat similar apparatus mentioned is the electric alarum. "The principle of it is that a ring placed on the penis is "so made that when expanded by erection it completes an electric "circuit, and so rings a small alarum bell placed under the sleeper's "pillow, which speedily rouses him, however deep his slumbers may "be." All these measures appear to us to be difficult of carrying out, and as the author truly observes, "Unless the patient is suffi- "ciently resolute to submit to having his rest broken, any measure "of this kind will be inoperative." The advantage of blisters is fully discussed; so, also, cauterization, stimulating injections, and the passage of bougies. The subject of suitable diet is likewise gone into, and the use of wine or spirits. In fact this little work covers, in a very small space, a large and important field of observation, and to those desirous of acquiring a scientific knowledge of this affection, together with its treatment, we most heartily recommend this excellent treatise on the subject.

Sciatica, Lumbago, and Brachialgia; their Nature and Treatment, and their Relief and Rapid Cure by Hypodermic Injection of Morphia. By Henry Lawson, M.D., Assistant Physician to St. Mary's Hospital, and Lecturer on Physiology in St. Mary's Hospital Medical School. 8vo.; pp. 200. London: Robert Hardwicke, 192 Piccadilly. 1872.

We have received a copy of the above work and shall notice it in a future issue.

Syphilis: its Nature and Treatment, with a Chapter on Gonorrhœa. By Charles Robert Drysdale, M.D., &c. 8vo.; pp. 165. London: Baillière, Tindall and Cox, 20 King William Street, Strand. 1872.

This little work has been received, but too late for notice in the present number of the Journal.

CANADA

Medical and Surgical Journal.

MONTREAL, SEPTEMBER, 1872.

SEWER VENTILATION.

Our system of sewerage in the City of Montreal is tolerably good; that is, we have sewers sufficient in number and size to carry off house drainage, and our Corporation are making strenuous efforts to lay down larger drains in localities where, from the growth of the city, the old sewers were not sufficient for the purpose. But, while we are inaugurating a system of drainage which, after all, is none of the best, there is no provision for sewer ventilation except, indeed, the many gratings at the street corners which, acting as ventilators, give forth their deadly eminations, to the evident and serious injury of the air of the locality. Can we wonder at the large infant mortality under such a state of things? These tender plants, requiring all the fostering care of mothers and nurses to keep life in their bodies, subjected and exposed, from birth, to a system of gradual but continued poison.

The public should be educated to the fact that poison does not of necessity require to enter the stomach to develop its deadly effects; expose an individual to noxious vapours, permit him to take them into his lungs; expose his blood, which is sent to his lungs for purification, to, not the pure air which a merciful and all-wise God has created for us to breathe in, but to the foul stenches from the emanations of sewers, a creation of man, permitted, through his stupid blundering, to spread through and contaminate, and render pestiferous the atmosphere we are compelled to inhale.

If an individual has in his back premises a foul privy which affects the air of the neighbourhood, he would be subjected to police inspection, sanitary officers would throng around like flies near a honey pot, and he would be forced, and properly so, to remove the nuisance. We are not, surely, asking too much of our Corporation to request them to take the filth they have assumed and carry it out of our way without rendering pestiferous the air

we breathe. If there were no means of remedying the difficulty we should be forced to be content; but when we know that it requires simply a little engineering skill and expenditure of money to remove the evil, we can hardly be blamed for wishing to see the work inaugurated forthwith. We have heard of a number of schemes from converting house spouts into ventilators, to building special ventilators at the higher levels of our city at the same time trapping all our street sewers; but it appears to us that there is no earnest intention on the part of the city authorities to move in the matter.

We call special attention to this subject at the present time as disease and pestilence is abroad, and while other communities are earnestly working in improving their sanitary condition we, in Montreal, are allowing valuable time to slip by, and are not stretching a finger towards the required change. It is a subject which must sooner or later engage the attention of our Corporation, and in our opinion, in view of the possible chance of an invasion of epidemic cholera, every means should be resorted to to improve our sanitary state and thereby lessen the possible spread of disease.

MEDICAL QUALIFICATIONS IN JAMAICA.

A Bill has been submitted to the Legislative Council of the Island of Jamaica, purporting to alter the statute which already exists in reference to the registration of physicians and surgeons in actual practice in that island. In perusing that Bill, which is published in the *British Medical Journal* of July 27, we observe the following clause: * * "so that licentiates of any college or "faculty of physicians and surgeons, recognised in all parts of the "Dominion of Canada, may be admitted to practice in this island." we cannot but express our wonder at the utter ignorance, shown by the framers of the Bill, of Canadian institutions and laws having reference to matters medical. We think it would be well for the Government of the Island of Jamaica to look into the subject ere they sanction such a Bill, as it would, in our opinion, undoubtedly lower the standard of the medical profession, in Jamaica, by placing it on the same level as that in some of the Maritime Provinces of our Dominion; where, if we understand aright, a person holding a diploma from any American college can obtain a governor's license which entitles the holder to practice in any part of the Dominion of Canada.

It may be urged that the Ontario Bill protects that section of the Dominion from encroachment, unless the person holding a governor's license submits to examination before their

Board; but we rather think that persons practising upon such qualifications in Ontario would do so under the same restrictions as those referring to practitioners holding a diploma from any university or college in Great Britain, and who do not choose to take out the License of the College of Physicians and Surgeons of Ontario. It was with a view of putting a stop to such irregularities that it was suggested by some leading members of our profession to secure a general Act for the whole Dominion. The measure has been before the profession for some four years, but there are so many conflicting interests that we feel certain that nothing will come of it. In the meantime we must protect ourselves in this Province of Quebec against the encroachment of other parts of the Dominion, since they refuse the right hand of fellowship, preferring to continue the old regime to the manifest lowering of the standard of medical education in our country.

MONTREAL GENERAL HOSPITAL—APPOINTMENT OF DR. ROSS.

The death of Dr. Fraser left a vacancy in the attending medical staff of the Montreal General Hospital; the duties of that office had been filled by the late Dr. Fraser during the past twenty-five years.

At the last quarterly meeting of the governors George Ross, A.M., M.D., was elected to fill the vacancy. We congratulate Dr. Ross on his appointment, and the governors of the hospital in having secured the services of a gentleman who, though young, is destined, if life and health be granted, to fill an important position in the medical and surgical staff of our city.

Medical News.

DIETETICS OF PHTHISIS.

In the discussion which followed Dr. William's late paper on the Effect of Climate, at the Royal Medical and Chirurgical Society, opposite statements were made with regard to the diet of the Icelanders; and subsequently Dr. Horace Dobell wrote to Mr. Thorlakur O. Johnsen, one of the few Icelanders in this country, to ask him for a detailed statement of the diet of the different classes in Iceland. Mr. Johnson is an excellent authority. The following in his reply, just received, which may be considered authoritatively to settle the question

"The population of Iceland may be divided, as regards diet, into two classss: the first class consists of clergymen, merchants, magistrates, doctors, and a few of the well-to-do farmers; the second class consists of farmers, labourers, and servants.—*Breakfast* Gruel made of milk and water, with rye or barley, dried codfish or cold mutton, butter and bread. During the summer and spring, the breakfast often consists of fresh fish, such as codfish, soles, salmon, or trout; afterwards, either gruel or coffee; and at some places eggs, especially eider ducks' eggs.—*Dinner:* Nine months in the year, salt mutton and barley-broth three or four times per week. During the remaining three months—viz., September, October and November—fresh mutton with turnips. In the autumn, every farmer slaughters a number of his sheep, which he salts down in casks for consumption. This salt mutton is, as a rule, so salt that it has to be steeped in cold water twenty-four hours before it is boiled, and even then it produces scurvy and other diseases of the skin and blood, which is quite natural from the great want of vegetables. The other three or four days of the week the dinner consists of dried codfish, rye bread and butter, sometimes cold salt mutton or fresh fish, where it can be procured. This meal is always finished by coffee.—*Supper* is, as a rule, very light, consisting generally of gruel made from barley or rye, mixed with milk and water. Where milk cannot be procured (which is often the case, especially amongst the poorer classes who live on the sea-coast), coffee is generally the substitute. It is not an easy matter to enter into all details, for in some places the poorer classes are reduced to great hardships as regards food, especially in the spring, before ships arrive from abroad. A great many then eat young seals, also parts of the whale, which is called in the Icelandic *rangi*, and is, as a rule, a very favourite dish. In winter time, *many have substituted tallow for butter, and in some cases raw oil, both seal and cod-liver oil.* Amongst the poor farmers, a family consisting of seven or eight persons will live on nothing else but the milk from one or two cows, a few dried codfish, and perhaps a small quantity of rye, not tasting either bread or butter, coffee or sugar, for months; even the flesh of sharks has been eaten by the poor people, when driven to do so by hunger; and from that cause I have heard that leprosy still exists in a few cases. At all the fishing stations round the coast, where people principally depend upon the sea, fish is the staple article for food both for breakfast, dinner, and supper; and, when rye-meal gruel is not added, coffee will follow. In many places, coffee is drunk four times a day.—Thorlalur O. Johnsen."—Mr. Johnsen adds in a postcript: "I have just had a letter from a friend of mine in

Reykjonik, stating that a young man in the Latin school, about 21 years of age, is dying from consumption."—*British Medical Journal.*

THE CURE OF CANCER BY ELECTROLYSIS.

At a meeting of the New York Pathological Society, reported in the New York *Medical Record*, January 2, 1872, Dr. Neftel presented sections of carcinomatous deposit removed post-mortem from a lady who had died in consequence of mammary cancer. About two years ago she noticed a hard and painful lump in the right mamma. This increased, and with the pain, extended to the axilla. These masses were removed by operation. Soon after the operation she had an attack of pneumonia, from which she did not recover until the lapse of several months. In the meantime the wound cicatrized, but the pain still continued, and extended down the arm of that side, making it almost useless. After several months she felt that the cicatrix became indurated, and from these there seemed to be a string of smaller lumps, which aroused the suspicion in Dr. N.'s mind that the disease had translated itself to some internal organ; she then insisted upon being treated by electrolysis, and the treatment was pursued, in conjunction with Dr. Bailey, of Albany. To the surprise of Dr. N., not only did the secondary tumours disappear, but the patient improved in general health. So marked was this latter effect that Dr. N. was inclined to believe that he had been mistaken in his diagnosis of internal matastasis. After several months tumors again showed themselves in the same locality; these were treated and likewise disappeared. Finally the cervical glands became affected, and she began to suffer from asthmatic attacks, in consequence of pressure upon the pneumogastric: these were succeeded by an attack of pleurisy, due to cancerous exudation, and she finally died delirious. At the autopsy, the liver, lungs, and cervical glands were found infiltrated with cancerous material.

In speaking of the effects of electrolytic treatment upon cancer, Dr. N. stated that he had reason to believe it would always be successful if employed before the disease had become constitutional.

CHOLERA.

This disease is said to be spreading in Russia and in India. In the former it is gradually extending from the eastern to the central and western portions. At Moscow it is prevailing in a most malignant form, and a few cases have appeared at St. Petersburg. It behoves the authorities of our principal seaports to exercise the greatest vigilance to prevent, if possible, its introduction into this country.—*Medical News.*

HEAT OF THE PRESENT SUMMER AND ITS EFFECT ON MORTALITY.

The temperature during the last week in June and the two first weeks in July has been almost unprecedentedly high, and with the result of largely increasing the mortality in our large cities, the principal victims being the very young and those of great age. The total number of deaths in Philadelphia during the week ending July 6th was 746, the largest number ever recorded here in any one week. Of these deaths, 512 were of children under five years of age, and 476 of children under two years of age. Cholera infantum claimed 274 victims, sunstroke 22, old age 20. In New York during the same week the mortality was even larger, having been 1,567, more than 100 per cent. greater than in Philadelphia, while the population of the former is only about 40 per cent. greater than that of the latter.

The mortality in Philadelphia during the week ending July 13th was 852, of which number 497 were infants under two years of age; 383 of them being under one year. Cholera infantum had 310 victims, sunstroke 68, old age 29. In New York during the same week the mortality was 1,056.

The heat in Philadelphia during the week ending July 20th was considerably lessened, and the mortality for the week was 587, being a decrease of 265 from those of the previous week. The deaths from cholera infantum were 210, from old age 14, sunstroke 10. From small-pox the deaths were reduced to only 6.

In New York the mortality was, during the same week, 961.

The extreme heat of the summer is not confined to this country. In Paris the heat was great, but the mortality had not increased at latest reports (28th June).

In India the heat has been, it is stated, (*Lancet*, July 6th), exceptionally great. At Allahabad, at latest accounts, it had reached 115 ° in the shade, while at Hyderabad it was 116 °.—*Medical News.*

TREATMENT OF HÆMORRHOIDS.

Hæmorrhoids, connected with prolapsus, were successfully operated upon by the application of nitric acid, some thirty years ago, by Dr. Houston of Dublin. The method found great favour at the time, but has been somewhat displaced by the ligature, and the section followed by the actual cautery. Billroth, of Vienna, has of late revived Houston's operation, and reports excellent results, especially in those cases where frequent and dangerous hæmorrhage had occurred.—*Lancet.*

Monthly Summary of Meteorological Observations taken at No. 26 Beaver Hall, Montreal, by THOS. D. KING:

JUNE. 1872.

Day.	Daily Mean Temperature	Daily Mean Humidity.	Daily Mean Barometer corrected to sea level.	Weather.	Quantity of rain in gallons per acre.
1	54.1	59.6	30.03	Rain	1,583
2	57.6	51.8	11	Clear	....
3	59.5	49.6	15	Clear	....
4	52.9	83.2	29.78	Rain	10,428
5	62.0	67.9	85	Clear	....
6	66.5	56.0	92	Clear	....
7	63.9	58.8	92	Rain	425
8	60.9	93.8	73	Rain	7,918
9	65.1	80.0	80	Rain	....
10	63.8	87.7	70	Rain	3,393
11	68.7	69.3	76	Cloudy	....
12	71.1	70.8	80	Rain	11,312
13	62.1	66.3	90	Rain	678
14	63.0	72.0	74	Rain	....
15	64.2	60.9	90	Clear	....
16	66.2	54.8	30.11	Clear	....
17	69.3	57.4	22	Hazy	....
18	69.7	57.4	25	Rain	....
19	70.4	69.2	18	Rain	2,488
20	76.3	69.3	17	Rain	10,858
21	81.2	66.7	10	Rain	....
22	74.7	50.6	17	Hazy	....
23	72.3	54.9	11	Hazy	....
24	72.8	54.1	04	Cloudy	....
25	72.5	65.5	07	Hazy	....
26	72.4	67.9	12	Cloudy	....
27	74.9	65.7	10	Clear	....
28	77.7	64.1	04	Rain	4,071
29	79.9	65.4	05	Clear	....
30	80.1	66.6	04	Clear	....
..	....	....	....	....	....
Mean.....	68.2	65.2	29.99	Total.....	53,154

JULY, 1872.

1	77.1	76.1	29.90	Rain	9,049
2	69.0	70.4	97	Cloudy	....
3	77.4	74.3	83	Rain	1,357
4	76.9	72.0	81	Rain	....
5	73.0	64.4	95	Clear	....
6	73.3	60.3	30.09	Clear	....
7	73.6	59.0	16	Clear	....
8	74.9	59.7	23	Clear	....
9	77.5	56.4	13	Clear	....
10	76.6	72.3	29.96	Cloudy	....
11	74.6	58.9	93	Clear	....
12	76.3	67.6	82	Cloudy	....
13	65.3	41.0	30.14	Clear	....
14	72.5	47.2	05	Clear	....
15	79.7	49.6	29.91	Hazy	....
16	82.9	62.3	81	Rain	....
17	80.0	69.0	89	Rain	....
18	70.8	89.9	93	Rain	....
19	73.3	46.7	30.00	Clear	....
20	70.5	57.4	06	Rain	2,262
21	67.9	80.2	29.90	Rain	13,574
22	66.2	59.6	85	Rain	4,071
23	66.8	59.5	96	Rain	....
24	68.6	59.0	94	Rain	....
25	68.0	56.0	30.11	Clear	....
26	63.0	84.0	29.81	Rain	26,016
27	64.4	64.1	97	Cloudy	....
28	61.6	64.6	30.05	Rain	18,098
29	61.0	89.2	03	Rain	2,714
30	65.1	53.6	30.06	Clear	....
31	65.0	52.3	30.01	Clear	....
Mean.....	71.4	63.7	29.99	Total.....	77,141

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Report of Sixteen Cases of Stone in the Bladder Removed by Operation. Occurring in the Practice of GEORGE E. FENWICK, M.D., Professor Clinical Surgery McGill University, Surgeon to the Montreal General Hospital.

(Read before the Canadian Medical Association.)

I am induced to lay before this meeting the results of sixteen cases of stone which have come under my observation during the past few years. Stone in the bladder is, in Canada, a comparatively rare disease, at least if we may judge by the number of cases which are presented. In Montreal we have two large hospitals which afford relief to the sick poor of the city and surrounding country parishes, embracing a population of 250,000, and stone in the bladder is so infrequent that few apportunities are afforded the surgeon of performing an operation for its relief. That stone in the bladder has been observed more frequently of late years than formerly is quite apparent. During my pupilage I had an opportunity of seeing the operation performed twice only in one hospital; but, since 1867 I have myself performed the lateral operation, for the relief of stone in the bladder, on fourteen occasions, viz.:

1867	3
1868	4
1869	1
1870	2
1871	3
1872	1

Of these cases there was but one in an adult. The others all occurred in children ranging from two-and a-half years up to thirteen years of age.

The first case of stone which presented itself was in the autumn of

1850, when I was called to see a child of four years of age, suffering from retention of urine. On attempting to introduce a catheter the instrument passed with a grating sensation over a foreign body which appeared to be impacted in the urethra, close to the bladder. As it was night, and having no assistance at hand, I deferred all operative measures until the following morning, when, in consultation with two other surgeons, I proceeded to remove the obstruction by an incision made in the raphe. The stone removed was over an inch in length and shaped somewhat like a bolt.

The next occasion I was called upon to relieve a little boy of 6 years who was suffering from impacted calculi, three in number, situated close to the meatus. Considerable force had to be employed in removing these calculi, but after some manipulation they all came away without employing the knife. This was in 1857.

No actual case of stone came under my observation throughout the next decade, though I had frequently seen cases of oxaluria, and lithic acid passed in sand. At this period, being unconnected with a hospital, I had fewer opportunities than I have had since my appointment to the Montreal General Hospital.

In the early part of 1867 a little Irish boy, six years of age was brought to the hospital. He was described by his father as not being a free pisser for over two years. It was distressing to see this poor little boy when the paroxysm would come on. He would dance on tip toe, leaning forward, seize the penis in his hand and drag it forward at the same time. From the violence of the straining the rectum became prolapsed. In this case the lateral operation was adopted and the child speedily relieved of a calculus weighing ʒiij., grs. xx., composed of phosphates, with a large central nucleus of lithic acid. This was in January, 1867. In March of that year a second case presented itself in a child of two-and-a-half years, when, by the same procedure, a stone weighing ʒj. ℈ij. was removed. This was an exceedingly dense and hard stone, composed entirely of lithic acid. There were in this case some peculiar features which demand a passing notice.

It has been questioned by surgeons whether calculous affections are ever hereditary. Cases are mentioned by some surgical writers which would almost lead to the belief in its having such an origin occasionally. In this particular case the father had suffered from frequent attacks of gravel, and he told me that his grandfather had died of the disease. I must state, however, that they were English people, and came from Norfolk, in which county

stone in the bladder is of more frequent occurrence than any other county in England.

Another circumstance connected with this case, and stated by the mother, was that the child had from birth suffered more or less in passing water. When an infant of a week or ten days old it had suffered from complete retention for the greater part of forty-eight hours. The bladder was considerably distended, and a medical gentleman had passed in a catheter and removed the urine. This points to the fact of the formation of a small calculus, most likely in the kidneys, during intra uterine life, and that this calculus became impacted in some portion of the urethra, or possibly had become lodged at the opening of the urethra into the bladder, and had given rise to the obstruction and retention of urine noticed. This is the more probable when we consider the size of the stone removed, and also its composition.

In April, 1867, another case of stone presented itself in the person of a little boy aged six years, a soldier's child, who had shown symptoms of stone for two years. I performed the lateral operation on this boy on the 4th May of that year. In this case an accident occurred which was unavoidable. As I was incising the prostatic portion of the urethra, the lower portion of the rectum became distended with liquid fœces, and, in consequence, the bowel was wounded, the liquid poured out of the wound in considerable quantity. The wound in the bowel was sufficiently large to admit the point of my finger; the stone was removed, and it proved to be a large uric acid calculus weighing half an ounce. Everything progressed favourably, but I was somewhat doubtful as to the result of the wound in the rectum. The child, however, made a rapid recovery, and before he left the hospital I examined the rectum and found that the wound had closed, leaving a cicatrix of about half an inch in extent.

Sir William Fergusson, in his lectures on the progress of anatomy and surgery, delivered before the Royal College of Surgeons in 1864 and '65, states that wound of the rectum is of little moment as regards the final results of the operation, and adds that the accident has occurred to him frequently, and he has recognized it as having occurred in cases where suspicion of such an occurrence did not exist at the time of the operation. In this case the cause was sufficiently apparent, but I deem it of importance to draw attention to the fact as implying that however carefully an operation may be performed wound of the rectum may result, and furthermore, that even though such an accident should occur it is not necessarily followed by permanent injury to the parts.

The next case which came under my observation was in a child

of four years, who was admitted into hospital early in February, 1868. I performed the lateral operation in February, and removed a small calculus, kidney-shaped, weighing ʒiii, which was composed of concentric laminæ of lithic acid and the phosphates. There is something peculiar in the history of this case. The child, at the end of two months, gave evidence of a continuation of its bladder irritation. The parents did not consult any surgeon, but in August of that year, six months after the first operation, he was again brought to the hospital, and I again ascertained the presence of a stone and cut him a second time, removing a small stone weighing ʒjss. He made a good recovery and has since been free from further trouble. It has been somewhat of a difficulty with me to account for the presence of a second stone in so short a period after the first operation, because I followed the usual custom of examining with my finger for the presence of a second stone, but none could be felt, and furthermore, there were no facets on the first stone removed to indicate the presence of a second; still, I can hardly suppose that a stone of the size of that removed could be formed in so short a period, and therefore must conclude that it escaped my observation.

Case VIII.—In March, 1868, a young lad aged thirteen years was brought to the hospital suffering from all the symptoms of stone. He had been in this condition for the greater part of three years. The agony, at times, was very great. He had been sounded without the stone being discovered, and had been under treatment, but of what kind I could not ascertain. A sound was passed and a small rough stone found to be present. On March 14th, the operation of lateral lithotomy was performed, and a calculus weighing ʒiij, grs. xlv, was removed. The little fellow made a speedy recovery, and left the hospital. The stone was almost entirely composed of the phosphates, hard, irregular and somewhat crystalline in its arrangement; its roughened exterior fully accounted for the amount of distress which the boy experienced.

Case IX.—A child aged six years was seen in the out-room of the hospital; he was suffering from incontinence of urine; would wet his bed at night, and even in the daytime the urine would dribble away, but there was no distress; the prepuce was elongated, and he suffered from considerable itching of the parts. He was placed under chloroform and a sound passed, when a stone was discovered to be present. The lateral operation was performed on the 27th October, 1868, and the stone removed. It was composed of a central portion of lithic acid, with a considerable coating of phosphates, and weighed ʒij., ϑj. He recovered without a single bad symptom.

Case X.—I was requested, about the end of December, 1868, by a confrère to see a boy, aged eleven, who had suffered from symptoms of stone for the past five years. During this period he had been sounded on several occasions, but no stone had been discovered. On examination under chloroform the presence of a stone was made out, and I advised the parents to bring the child to the hospital for operation. This was done, and I performed lateral lithotomy on the 9th January, 1869. A small round and exceedingly dense stone was removed, composed almost exclusively of uric acid; weight, 105 grs. He made a good recovery and left the hospital at the end of ten days.

Case XI. occurred in the person of a little boy aged seven years, who had been admitted into hospital and had been suffering from symptoms of stone in the bladder for the past four years. The operation was performed on the 5th September, 1870, and a rough, irregular stone removed, composed of a central nucleus of lithic acid, partially embedded in a phosphatic layer.

Case XII.—A child aged five years was brought to my own residence, and on examination I ascertained the presence of stone in the bladder. There was considerable distress, and at times the straining was so great that the rectum became prolapsed. These symptoms had only been noticed by his mother during the last year. I requested her to take him to the hospital, which was done, and the lateral operation was performed on the 21st September, 1870. The stone removed was circular and flattened; it was friable, very rough on the exterior, and weighed ʒijss.

Case XIII. occurred in an adult, aged twenty-nine years, who had been suffering, as he supposed, from stricture of the urethra for several years. The bladder irritation was very great, so much so as to perfectly preclude his attention to business. I was requested, in April, 1871, to visit the patient, which I did, having to travel by rail some sixty miles to reach his residence. I found him confined to his bed, which he seldom left; motion of any kind increased his agony, and he had been in the habit of drinking large quantities of diluents which, he stated, relieved him. I was obliged to give him chloroform before attempting any exploration, and a stone of considerable size was found in the bladder; no stricture of the urethra existed, although he had been treated for that complaint by the passage of instruments. This treatment had aggravated his malady, and for hours after the introduction of a bougie the bladder irritation was very considerable.

My patient determined to come to Montreal for further consultation and advice. He was admitted into the hospital as a private patient on the 28th April, and the lateral operation performed on

the 1st May, 1871, when a stone weighing ʒvi was removed. It was soft and friable, and broke into several fragments when seized by the forceps. His general health was not good and he made a tedious recovery. There is one point of interest in the history of this case. His grandfather had suffered from stone in the bladder, and his father had on several occasions passed small calculi. A brother residing in another part of the country has since consulted me, suffering from bladder irritation, with lumbar pain and general dyspeptic symptoms, and on microscopic examination of his urine I found quantities of lithic acid and a few octahedral crystals of oxalate of lime.

Cases XIV. and XV. occurred in children of the ages, respectively, of seven and six. The first was admitted into hospital on the 19th May, 1871, and the operation performed on the day following. The second case came to hospital a few days after, and was cut on the 1st June, 1871.

In the first case, that of the child aged seven years, the stone removed was fusiform in shape, having a projection which looked as though it had projected into the urethra. The body of the stone is round and smooth, as if it had rested on the neck of the bladder. Its weight was 80 grains.

The second case, in the boy aged six years, the stone is round, irregular in shape, and spiculated. Its weight was 100 grains. Both these children recovered after a fortnight's residence in hospital.

Case XVI.—The subject of this case was an infant of a year and a half who was brought to the hospital on the 30th August, 1871, and on examination I discovered a small calculus which I determined to remove. The following day, having made every preparation, the child was brought into the operating theatre and placed under chloroform. Although convinced of the presence of a stone I failed, on this occasion, to obtain any evidence of its presence with the sound. Several members of the medical staff of the hospital were equally unsuccessful: I therefore refused to operate and allowed the child to return to his home.

On the evening of the 9th August last (1872) the child was brought to my surgery, and on examination I again discovered the presence of a stone. On this occasion I took the precaution of securing the assistance of several medical gentlemen, who all agreed with me as to the actual presence of the foreign body. Under these circumstances the child was re-admitted and cut on the 12th August, when a small calculus, about the size of a French bean, and weighing 15 grains, was removed. The child did well.

The cases of lithotomy which I have detailed have all, with one exception, been in children. The operation selected in all

has been the lateral, and the results in all have been satisfactory. Indeed it is recognised by all surgeons that in this class of patient, when the operation is satisfactorily accomplished the results are almost certain of after success. There are, however, certain facts in connection with the operation of lithotomy in the child which deserve attention, and which render it more difficult of performance than when practised on the adult. Firstly, the parts are smaller and the incision must be correspondingly small. The parts in the child are, in structure, soft and yielding, so that in passing the sound or staff, in consequence of the sharp curve of the urethra in infants, beneath the pubis, the instrument may be forced outside of the urethra and pass between the rectum and bladder. Should the surgeon attempt to cut with the staff in this position his operation would be almost certain to fail, and furthermore, he would, in all probability, inflict fatal injury on his patient. These accidents have occurred even in master hands. Sir H. Thompson draws attention to this circumstance in his work on "Practical Lithotomy and Lithotrity." It will readily be admitted that the only practical point which will obviate the occurrence of such an accident is to adhere strictly to the rule of making the staff strike the stone audibly before attempting to cut. "There is one great rule," observes Thompson, "which, as far as I know, is the only safeguard against the performance of an operation on a staff which has not been passed into the bladder, and it is to require a clear, audible, or tactile proof of contact between the stone and the staff on which the patient is to be cut."

Another difficulty in this operation in children is the ease with which the bladder is pushed in front of the finger after all cutting has been accomplished. This circumstance is spoken of by Sir W. Fergusson in his lectures on surgery, and he even illustrates it by the case of a child four and a half years of age on whom he performed the lateral operation. He states: I "could feel a considerable space at the point of my finger and was convinced that the upper part of the membranous portion of the urethra, as well as the sides above the wound, had given way to the pressure of my finger, and that I was only pushing the prostate gland and neck of the bladder upwards and inwards. These parts seemed to recede before the smallest imaginable force."

I may state, gentlemen, that this accident has occurred to me more than once, and that being fully alive to the importance of not pushing the bladder before my finger, I have at once introduced a director along the grouve in the staff, and have made it act as a further guide to the finger.

All the operations save one have been performed by the lateral method. The exceptional case was the first one of this series, in that case the stone was not in verity in the bladder, but was impacted in the urethra..

Case of Cerebro-Spinal Meningitis. By GEORGE WOOD, M.D., Coaticook.

R. F., aged 23. I was called to see him on the 27th June, 1872, and found that he had been ill for ten or twelve days, and had been under the care of two different medical men who had "given him up," and the last one in attendance had recommended his family to call me to attend him. I found the patient a well-formed, robust young Canadian, in the employment of a large lumber concern in the neighbouring States. The case was a well-marked one of Cerebro-Spinal Meningitis; head very much retracted; very general hyperæsthesia; the severest pains in the temples, nape of neck and sacrum; tenderness of the epigastrium, with vomiting. The vomiting was more persistent earlier in the case; pupils dilated; did not respond readily to stimulus of light, semi delirious; tongue coated with creamy fur; difficult deglutition, and respiration hurried; temperature, 102°; pulse, 84; bowels constipated; urine scanty and high colored; no appearance of petechiæ.

Gave him Pot. Iod., grs. ij., every four hours; also, ℞ Ext. Hyosciami, grs. v.; Ext. Belladonnæ, grs. j.: ft. pill, No. j., to be given every six hours; also, 30 grs. of Chloral, in one dose, at bedtime; ice water to the head and hot sponge bath along the spine; for food, beef-tea.

Not being able to see the patient on the 1st July, I ordered the same treatment to be continued.

Saw the patient on the 2nd of July; head still retracted; the pains had not diminished in severity; pulse, 90; temperature, 102°; bowels had moved very freely—due to some pills which were given him in my absence; urine increased in quantity, and lighter color; still semi-delirious.

Gave him Pot. Iod., grs. ij., every four hours, and Ext. Calabar Bean, $\frac{1}{8}$ gr. every four hours; diet as before; pills to be continued; ice-bag to head, and hot spine bath.

5th.—Less delirium; rigidity of neck still continues; intense pain in head and sacrum; temperature, 101 1-5°; pulse, 106; great vigilance; bronchitis in apex of right lung; pupils contracted—due to Calabar Bean; urine less copious; bowels still

loose; substituted the Bi-Chloride of Mercury for Pot. Iod.; Ipecac and warm fomentations for bronchitis.

6th.—Appearances more favorable; cough subsiding; pain in head less intense. Treatment as before.

8th.—Pulse, 74; respiration, 26; temperature, 99 4-5 ⊂; pain in temples continues, but pain and rigidity of neck less intense; pupils dilated to-day, having finished Calabar Bean last night; bowels regular; urine more copious; tongue cleaner; vigilance continuous. Continued Hyd. Bi-Chloride; gave Chloral, 15 grs., every four hours. No delirium.

11th.—Much better; slept last night; pulse, 80; respiration, 22; temperature, 98 4-5 ⊂; pupils normal; bowels regular; urine natural; appetite returning; still has pain in head and back; applied Belladonna and vinegar topically. Gave Pot. Iod. with Peruvian Bark and Port Wine.

13th.—Much worse; pulse, 82; respiration, 20; temperature, 98 4-5 ⊂; greater retraction of head, and intense pain through head, sacrum and hips, annoying hiccough. Applied Croton Oil freely to neck and whole length of spine, except lumbar region. Treatment continued.

15th.—Much the same; rigidity much better, Croton Oil having relieved it. Gave Calabar Bean and Pot. Bromid.

16th.—Pulse, 68; respiration, 20; temperature normal; pain in head and neck less; increased through chest and back. Continued Calabar Bean and gave Pills of Belladonna Hyosciamus and Valerian once every six hours. Continued Croton Oil to the back.

17th.—Did not sleep the preceding night; suffered intense pain in the afternoon of 17th; very much excited, requiring restraint to keep him in bed; towards night less violent, but pains still intense; pulse, 82; respiration, 30; temperature, 99 4-5 ⊂; substituted Dover's Powder for the Bromide; went to sleep immediately and passed a nice night.

19th.—Patient much better in every respect; since taking the Dover (every six hours) has not suffered any pain; rigidity fast disappearing; appetite good; bowels slightly constipated.

20th.—Still improving. Continued the same treatment.

22nd.—Much better; walked about yesterday; pulse, 78; respiration, 18; temperature normal; appetite voracious; had inflammation of eyelids and slight conjunctivitis; stopped Calabar Bean and Pills, and gave Dover's occasionally.

26th.—Convalescent; put him on Bark and Wine.

August 5.—The patient is recovering rapidly.

August 20th.—The patient is so far recovered as to be able to attend church.

Case of Strangulated Umbilical Hernia. By W. B. Slayter, M.D., M.R.C.S., Eng., L.R.C.P.L.; Professor of Obstetrics and Diseases of Women and Children, Dalhousie College, Halifax, N. S.; Surgeon Provincial and City Hospital.

The following rather singular case of Strangulated Umbilical Hernia is one of more than usual interest, and, possibly, may be considered worthy of record:

Mrs. McA., aged 57, states that she has been subject to dyspepsia for many years, and that when she ate any indigestible article of diet, bilious vomiting would set in and continue for several days. She also states that she has had an irreducible umbilical hernia for nearly twenty-seven years, and that the bowels never act unless she takes an aloetic purge. Occasionally, when troubled with these bilious attacks, the hernia would swell up and become very painful, but in the course of a few days this state of things would pass off and she would be quite well again. Several surgeons have at different times endeavoured to return the hernia, but without success. When called to see her I found her complaining of acute pain in the stomach, accompanied by constant bilious vomiting, which she fancied was caused by a piece of rich cake eaten a few hours before the symptoms shewed themselves. The skin was hot and dry: pulse, 92: tongue dry, and covered with a white fur: bowels had been moved freely the day before, after the usual dose of aloes. On examining the hernia it was found to be extremely large and tender; the parts covering it somewhat œdematous, but of a natural colour; no tenderness of the abdomen, and very slight tympanitis were present.

A difficulty as to diagnosis immediately arose. Was the vomiting the mere result of disordered digestion, and the inflamed condition of the hernia the result of the constant vomiting; or, were these symptoms the result of a strangulated hernia? The fact of the patient having had repeated similar attacks, acting on the hernia in the same way; the bowels having been moved but a few hours before the attack came on, and her statement that the hernia did not become swollen and painful till some time had elapsed after the vomiting commenced: certainly all favoured the idea that the bilious vomiting was the cause of the hernia trouble.

Being somewhat doubtful, it seemed best to act the "trimmer"

and merely treat the symptoms and watch the case. Counter-irritation over the stomach, Opiates, Bismuth, and Chloroform internally, very soon relieved the vomiting and pain in the stomach; the skin became moist; pulse, 96; patient cheerful; hernia still swollen and painful.

On making a visit the following day I learned that she had passed a restless night; there had been no return of the vomiting or pain in the stomach; hernia still tender; no passage of fœces or gases from the intestines; no tenderness of the abdomen, and but slight tympanitis.

At my suggestion, a consultation was called, and after carefully considering the above-mentioned symptoms it was thought that probably the hernia was strangulated; but as no immediate indications for an operation were present it would be better to endeavour to reduce the inflammation in the hernia, and possibly relieve the stricture.

She was ordered $\frac{1}{3}$ gr. of Morphiæ Mur. every third hour; to have ice constantly applied to the hernia, and to have an injection of Oxgall and water into the lower bowel.

2 p.m.—Nothing passed from the rectum but the injection; tenderness in the hernia somewhat diminished; pulse still under 100; skin hot and moist.

The symptoms continued about the same; the patient cheerful; no increase of the pain, and no return of the vomiting; passed a very quiet night under the influence of the Morphia. Another injection of Oxgall and water was administered nearly twenty-four hours after the first, and was followed by a free evacuation of dark-coloured fœces. The hernia still continues tender, but no vomiting or pain is present. Ordered to continue the Morphia and ice.

About 3 p.m. of the same day I was called to see the patient, who had become suddenly worse. When I arrived, found her skin cold and covered with a clammy perspiration; pulse very rapid and thready; countenance anxious; in fact, all the symptoms of collapse were present. In about a half hour she died.

Post Mortem Thirty Hours after Death.—After carefully dissecting down through the hernial coverings and opening the sac, a very large mass of omentum was found, greatly congested and covered with patches of lymph. On moving this mass to one side a small knuckle of intestine was discovered, very dark in appearance, also covered with lymph patches, and tightly strictured by the ring through which the mass protruded. No rupture could be dis-

covered, but on dividing the stricture the parts were readily returned.

The case is very interesting as regards diagnosis. The previous history—the absence of continuous vomiting; the presence of pyrexia; tenderness and pain in the hernia, together with the free evacuation of the bowel—might reasonably have led me to diagnose a bilious attack, followed by acute inflammation of the hernia. On the other hand the acute inflammation, coming on suddenly, only two or three hours after the vomiting commenced; the continuous tenderness and pain in the hernia itself, were symptoms which would lead one to suspect strangulation. The cessation of the vomiting and evacuation of the bowel, below the stricture, had a tendency to cloak the real state of the case, and make the diagnosis one of extreme difficulty. Of course, if the diagnosis had been clear, and an early operation performed, the case, probably, would have turned out differently.

A Case of Spontaneous Expulsion in Shoulder Presentation. Reported by Z. Hebert, M.D., C.M., Whitehall, N. Y.

A woman, 28 years of age, having had four children, became pregnant a fifth time. On the 4th of April last, when about six months advanced in gestation, some drunken men entered the house and began beating her husband. She went to his assistance and strained herself very much trying to save him. After this time she never felt the motions of her child but once, the same night, and that very slightly. She lost her appetite and felt feverish for several weeks afterwards; her breasts became flabby, and she had the feeling of a dead weight in her belly on changing position; she also noticed a gradual diminution of the abdomen, and recession of the umbilicus, until she thought everything had passed off. She went on nearly two months after when she was taken with labour pains in the night time, but waited until morning before calling a physician. This was on the 29th of May last. When I got there I made a *per vaginam* examination, and found the *os uteri* fully dilated, and a tumour—as large as the bottom of a tea-cup—protruding at each uterine pain, but receding completely when the contractions ceased, but which presented no sign of being the head of a child, and as this protusion did not seem very soft and fluctuant, but spongy and more or less consistent, I sought for another explanation than that of such a protrusion of the bag of water. I pressed the tumour and could feel a prominence on its upper part, which I was sure did not belong to any part of the head on account of the fold of a joint I could feel on

each side of it, nor the buttock from the joint being so small; but there remained to say whether it was a shoulder, an elbow, a heel, or a knee-joint. Although the membranes were thick, I could follow the lower part of the limb, running obliquely backwards, and to the right much further than I could a foot, and felt no continuation of a limb, above the joint, that would lead me to believe it to be a knee or an elbow. I then diagnosed the case to be a shoulder presentation, although I could not easily feel the ribs, for the tumefied scapular region which presented itself did not allow of feeling them, and I could not reach under the joint through the membranes. I then ventured to rupture the membranes at the presenting part, as they were in the way of satisfying myself as to my correct diagnosis of the position, and as I could feel no fluctuation of the waters, showing they were too scanty to be of any use in case I should have had to perform turning, which I intended to defer to the last, as the operation could be of no benefit to the child, for I was convinced of its death by the characteristic symptoms that had presented themselves before, and as the bipolar method of turning with both hands externally could not be performed, the child being so small, and no liquor amnii present, I concluded that the operation of introducing the hand into the uterus would be more dangerous to the mother than any result of leaving the case for some time to nature, which I intended to help in effecting spontaneous delivery, thinking it possible because the child appeared so small, judging by the time of its death and by size of the woman, and as expulsion seemed to have already commenced of itself.

Having ruptured the membranes, a very small quantity of liquor amnii, of a somewhat viscid character, escaped. I then paid particular attention to the way in which delivery would take place. I confirmed my diagnosis by feeling the ribs under the axilla, and by a little more examination I made out the position to be the right dorso-pubic, the back of the child directed towards the abdomen of the mother, the head to the left of and above the pelvis, the breech and inferior extremities to the right and somewhat towards the right sacro-iliac synchondrosis. I then noticed that each uterine contraction seemed to act upon the child so as to bend it, bringing the breech to the head, which caused the back of the child to engage in the brim of the pelvis and gradually slide along the plane of the right ischium until it got nearly in the hollow of the sacrum, when it had rotated nearly a half circle, the head remaining almost in the same position.

At that time the right scapular region of the child, with a part of the back, had arrived at the perinæum, which they were distend-

ing rapidly. The child was not bent directly forwards, but somewhat to the left side; but when the buttocks got to the hollow of the sacrum they were thrown directly into it and expelled in that manner; then the left shoulder and arm escaped, and finally the head. I did not separate the cord, but waited for the placenta, which was expelled a few minutes after. The child presented no signs of a non-mature one, but the bones of the skull were attached to the base of the cranium, but did not unite above to form the sutures, and the scalp was distended with fluid, the skin peeled off easily, showing that intra-uterine maceration had begun for some time before birth. The tumefaction produced by pressure and that we generally find on the presenting part of the scalp of the child in cases of vertex presentations was well defined on the right scapular region, and can yet be seen, as well as other characteristics of the case, of which I have a preparation that I keep at my office. The placenta is a battledore one. On examining it it is found to have suffered inflammation by the products of lymph deposited on its surface, and by the thickness of the membranes.

After delivery I bandaged the woman, as I generally do, and after giving my orders to the nurse I left the house and called to see her two or three times after. No milk appeared; the breasts remained flabby, and she had no marked fever on the third day.

Although she was getting very well I recommended her not to leave the bed for ten or twelve days at least, but on the 5th day of June, the eighth day of her confinement, I was surprised to see her entering my office, asking for some remedy for a cold she took the day before in going out. I blamed her for her imprudence, gave her some remedies, and urged upon her to go home right away, as I was afraid it would rain, and instructed her not to leave the house for five or six days. She obeyed, but kept working all the time, and did not fail going out after the time mentioned, and she is now enjoying good health.

Before leaving the description of the case I brought before you it might not be out of place to give a brief account of the few cases of the same nature first mentioned. Denman was the first to describe natural delivery in shoulder presentation, and he considers it to be a turning of the child within the uterus, effected by the powerful uterine contraction upon the body of the child, and he explains the possibility of such an occurrence as follows:

When the uterus has contracted for a long time upon the child, so as to render it so compact as to spend all its force upon it, the contractions act on the most moveable part of the body of the child, and the inferior extremities being the most prominent, become that part which is moved downwards, while at the same

time the shoulder and head move upwards so as to replace the space made by the descent of the breech, and thus a rotation of the body of the child taking place on its antero-posterior axis, until at last the breech becomes the presenting part, when the labor proceeds as in an ordinary presentation of the breech, and this he calls "Spontaneous Evolution."

Douglass, however, denies the possibility of snch a delivery, and having met with several cases he explains them thus:

When the shoulder presents, the clavicle rests under the arch of the pubis; the neck behind and to one side of the symphisis pubis; the head above the brim and more to the same side; the breech to the opposite side; the back to the back of the mother. As the uterus acts upon the child the neck is forcibly bent and the head forced on the thorax, while the contractions force down the breech in the hollow of the sacrum, causing the vertebral column to flex successively forward until the breech has escaped the perinæum. He adds that when the back slides along the hollow of the sacrum it does so rather obliquely; but when the two buttocks pass along the sacral curve they are expelled directly in the antero-posterior position; next comes the opposite shoulder and arm, and lastly, the head. This Douglass proposed to call "Spontaneous Expulsion," instead of "Spontaneous Evolution," as called by Denman.

This explanation of Douglass seems to apply to dorso-sacral positions only, and I don't know of any description that has been given of a case as such the one I have been describing, that is, of dorso-pubic; the difference, however, with Douglass, is at the beginning of the labor only, but the termination of the delivery is precisely the same. The "Spontaneous Evolution" of Denman, however, is said to have occurred, but it must be very rare.

Cases from my Note-book. By W. E. Bessey, M.D. *Case of Contracted Knee-joint of Twelve Years Standing Cured by Operation.*

Sarah C., a young girl, aged sixteen years, was brought to me with a contraction of the leg at the knee-joint, of twelve years duration. Patient was very healthy in appearance; a bright, intelligent girl, but walked with a crutch and cane.

I was informed that twelve years previously, when quite young, she fell upon some ice and hurt the knee, inducing a severe attack of synovitis, which left her leg in this contracted position, and having been advised to go to the States, with a view to having an operation performed for the straightening of the limb, she had

been advised by the Catholic clergyman of the place to consult me first as to its feasibility.

I examined the limb, found it quite healthy, but contracted to an angle of about 45° ; the knee-joint was also possessed of slight mobility; flexion and extension being possible to the extent of about an inch at least; a strong check to further motion seemed to exist within the joint itself, which I believed, and afterwards found to be bridles of bone, and among the hamstring muscles the contracted tendons of the biceps, the semi-tendinosus and semi-membranosus effectually confined the extension of the joint to a very limited range.

The leg appeared perfectly healthy, but much smaller and less developed than the opposite limb, which might be owing to not being used; for a similar reason the opposite limb was much stouter than usual for a girl of the age, owing, I suppose, to the amount of duty it was called upon to perform. There was great solidity of condyles of the femur, but otherwise the joint seemed normal, and there was no sinus or traces of such.

Having given an opinion favourable to an operation, the patient left to consult her friends as to the advisability of having it performed by me at her own residence, instead of going abroad to obtain relief. This caused me to be consulted by her father and and clergyman, the Rev. Father S., to whom I explained the nature and prospects of such operations, and three days afterwards I was requested to appoint a day for the operation, which I accordingly did, and upon the afternoon of Friday, 15th October, 1869, I undertook my maiden operation for the relief of a joint disease.

Having placed my patient upon a strong deal table and duly administered chloroform, which I now entrusted to an assistant, watching it myself, I caused the limb to be as firmly extended as possible, and severed the the tendon of the biceps or outer hamstring, and also that of the semi-tendonosus of the inner hamstring muscles ; the others not appearing rigid I trusted to their elasticity and was not disappointed.

I now found that the severing of these tendons only permitted a more free, but still very limited motion in the joint.

I next began making forcible flexion and extension, continuing the process carefully, to avoid fracturing the condyles at the epiphyses, until I had succeeded in snapping a great number of bony adhesions, and had succeeded in obtaining a free movement of the joint so far as they were concerned. The inner hamstring muscles now became quite tense and did not appear capable of permitting complete extension of the joint. I allowed the limb to rest a few minutes; carried the administration of the chloroform as far as

possible, and then after having applied the usual flannel roller, with a little steady effort succeeded in completing the extension sufficiently to apply a straight back splint, well padded, and in binding the limb firmly down to this appliance. Allowing the limb to remain in this vice for a few hours I removed the bandage and re-applied them so as not to impede the circulation in any degree if possible.

The patient slept well during the first night under the influence of opiates, and went on to do well, the knee-joint giving me not the slightest trouble or anxiety. The ankle, however, was, after a time, the source of much anxiety to me, since from the feeble nature of the circulation in the foot during the first few days, a superficial slough took place over the tarsal bones, which I treated with acid carbolic, one part in thirty, with excellent results finally, although from its slowness in healing I felt much grave anxiety at times.

This difficulty in the case might also have been avoided by doing without pressure over the region of the instep and shin-bone, where the bones are very superficial, or by the use of extra padding at the points indicated.

The subsequent treatment consisted simply in securing perfect rest and immobility of the knee-joint during the winter months, and in keeping the muscles of the thigh confined by a roller, to prevent any possibility of any interference with the reunion of the the divided tendons by any spasmodic contraction.

I had a frame constructed after the pattern of figures 11 and 12 in Bauer's work on joint diseases, with a knee-strap to prevent anterior movement of the joint. This was worn continually, and only removed for ablution and dressing. After the patient began to move about, with the crutch and cane as a support, and the leg swinging, the weight was gradually allowed to rest upon the extremity in standing, and passive motion of the knee-joint was made by myself as often as possible, generally once and sometimes twice a week. By this means I satisfied myself that the joint was perfect, and also that the severed tendons had reunited, and gave evidence of a tendency to undue contraction. This I endeavored to overcome by Bauer's contrivance.

Twelve months after the operation I allowed the crutch to be dispensed with, and the leg to be depended upon entirely in walking, assisted by the cane and the apparatus, to secure against accident, and to prevent undue contraction occurring in the reunited hamstring muscles. After a few months more the cane was dispensed with and the frame alone relied upon for safety in walking. This was continued until July, 1871, almost two years subsequent

to the operation, and finding the frame produced superficial abrasions upon the now active limb, and as I now feared no bad results from the use of the limb, I encouraged my patient to dispense with that also, and accordingly she did so, and has continued active ever since.

My last communication from her asks the advisability of using a shoe with a cork heel, to remedy the slight shortening which exists to the extent of three-quarters of an inch, which I have recommended; and as my patient expects to become a pupil at a convent in the City of Montreal at an early date, I trust to have an opportunity of showing the case to some of my professional brethren, believing it to be as near as possible to a perfect success.

P.S.—I regret to add that undue delicacy on the part of my patient has prevented me from being able to secure photographic illustrations of the case.

Reduction of Dislocation of Hip-joint (Upwards and Backwards) Nine Months out.

On Thursday, 17th February, 1870, a fine healthy boy, aged 12 years, was brought to me from the neighborhood of Honover, Ont., eighty miles distant. He was accompanied by his father and uncle, who were desirous of consulting me as to the possibility of having a dislocation of the hip-joint of the right side reduced, and which, they said, had existed since the May previous, a period of nine months. The father stated that the accident was caused while wrestling with an older boy on his way home from school, who first threw him down and afterwards kicked him on the inside of the thigh, and that on rising the present condition of things existed.

I gave my opinion as doubtful, but gave the case a careful examination and found matters in the following condition:

The boy was able to walk for the latter part of the time pretty well, but without much comfort: there was a continual uneasiness —sometimes pain in the hip—when he kept the leg in motion; the trochanter was very prominent: the head of the femur rested upon the dorsum of the ilium: the knee was drawn up above the opposite, and the thigh strongly adducted; the toes rested upon the tarsus of the opposite foot, and when walking the toes only touched the floor and the whole body yielded to accommodate the want of mobility in the hip.

Having satisfied myself, from walking him about, stripped, before me, and by a close inspection of the part, that it was a simple dislocation, and not hip-joint disease. I next explored the acetabulum with a needle, and found it contained some soft substance

only, from which I argued that if the bone could be restored to its natural position, the pressure of the head of the femur would cause absorption of such deposit, and a much more useful and moveable joint than the present abnormal joint would be the result.

I accordingly decided to attempt the reduction, and requested them to return in the afternoon, when I would be ready for them, in the meantime to give the lad no food or drink, as they were putting up in a hotel.

Returning, as directed, about 2 p.m., I placed him upon the floor between two hooks, one screwed into the floor, to which I fastened a strong linen towel, using it as a perineal band or fixed point; the other into the wall, in such a position that traction would be made over and across the opposite leg, just above the knee. Having adjusted to the limb a wet towel, I brought the pulleys into requisition, and, assisted by the two men, made steady, powerful traction upon the limb for some time, drawing the head of the bone from its abnormal position down to the lip of the acetabulum. I now made several ineffectual attempts to lift the head of the bone over this obstruction, and was obliged to desist. I now felt the want of a similar lateral pulley to raise the bone over the lip of the acetabulum. However, after doing all I could to succeed in this way to no purpose I discarded the pulleys, and continuing the chloroform until the muscles were perfectly limp, I attempted to reduce the dislocation by flexion and rotation, and in this I happily succeeded on the fifth attempt, and after much labor and patient perseverance. In my first attempt I satisfied myself of my ability that I had the head of the femur under my control, as it moved freely. I tried this, and a second time, without any show of success. Upon the third trial, however, I succeeded in placing the head of the bone riding upon the lip of the acetabulum. Emboldened by this success, I made a fourth attempt, with utter failure, and succeeded only in producing even greater deformity than before. I now, after some hesitation, determined upon another attempt, and this time, after much care and patience, succeeded in slipping the head of the bone into the acetabulum with an audible thud.

I now brought the limbs alongside and requested the delighted father to measure and inspect them. They were now of the same length, rotundity of hips same; in short, all deformity had disappeared, much to the gratification of all interested.

I now adjusted a long splint to the leg and side, and bandaged the limbs together; gave the father several half-grain doses of opium in powders with him, to administer at intervals of six hours if necessary; gave him, also, Tr. Opii, and Plumbi Acet, with

directions to make a sedative lotion to apply to hip if any pain, heat or swelling should arise, and as soon as he was sufficiently restored from the chloroform allowed them to start upon their homeward journey, it being good sleighing and a mild winter day, and requesting them to have him seen by the local medical resident once a day; the leg to be kept perfectly quiet, in bed, for three weeks; then to move about for first three months with crutch and cane, to avoid any further difficulty from a too speedy use of limb.

At the end of that time the father visited me, much pleased with the result, stating that his son was able to walk a little with the leg, using a cane; that no pain or swelling had followed its reduction, and that it was constantly acquiring strength; and the local medical attendant who had endeavored to dissuade him from the undertaking in the beginning was now well pleased with the result.

I have not heard from the patient since, but indirectly I am informed that he is all right.

March 11th, 1870, I was consulted by the mother, on behalf of of her daughter who had been totally deaf upon one side for the past four years. She had consulted several medical men, and tried various patent medicines, vaunted as cures for deafness, without success. The girl was subject to occasional attacks of severe pain in the deaf ear, but beyond this they had not noticed anything peculiar.

On examination with the naked eye I thought I could discover a dark mass at the bottom of the meatus. This I confirmed by using Hutchinson's Ear-Lamp, which enabled me to throw a flood of light down upon the mass in question. I now recognized it to be a foreign body, about the size and appearance of a black bean. I took a small silver scoop and, by distending the meatus, succeeded in removing *four small beans*, one of which—the most external—was quite firm, the others were in various degrees of decomposition. (I should have mentioned that during the three days previous a discharge had taken place from the ear.) It is needless to say that hearing was at once restored, and the subsequent treatment consisted in syringing with warm water to secure cleanliness and soothe the irritated surfaces of the meatus.

The true cause of deafness In this case had undoubtedly been overlooked through carelessness in examination.

May 10th, 1870, a child, aged four months, was brought to me, having a congenital deformity consisting of a deficiency in the

development of one leg. The left thigh was about three inches shorter than the opposite one; the bones of the pelvis were perfectly developed, and the hip-joint of the deficient side was also perfect; the thigh muscles were also full size and strength, and the knee and other joints were also perfect; but the leg was flexed upon the thigh by a firm contraction of the biceps tendon or external hamstring muscle, and this gave the leg and foot an upward and outward flexion. The leg, from the knee to the ankle, was about an inch shorter than its fellow of the opposite side, and the foot a little smaller than the opposite.

I severed the biceps tendon and brought the leg down to a straight position, keeping it there by a straight splint, which in a few days I substituted with a gutta percha mould. This was applied for a period of about three months, when it was removed, and the severed tendon appeared to have perfectly reunited.

When about ten months old the child began to use its feet in standing, and a cork addition to the sole was added, and a steel support extended up the leg to prevent twisting. With this appliance, which has been several times removed, the child began to walk, and is now as active, to all appearance, as if nature had formed her perfect.

I mention this case as being one of nature's singular freaks during *intra uterine* life.

Proceedings of Societies.

THE CANADIAN MEDICAL ASSOCIATION.

The annual meeting of the Canadian Medical Association opened on the 12th instant in the room of the Natural History Society.

Dr. D. C. Hamilton, of Nova Scotia, one of the Vice-Presidents, took the chair in the absence of the President, Dr. Sewell, of Quebec.

Dr. McNab of New Hampshire, was invited to take a seat as a Vice-President.

The order being called for proposals for membership,

Dr. David called attention to the fact that at the last meeting a resolution was passed making every proposer and seconder liable for the fees.

A number of gentlemen were then proposed and accepted as members.

After the minutes of the last meeting had been read and con-

firmed, the Secretary, Dr. David, read a letter from the President, expressing his regret at not being able to attend on account of a difficult case on his hands. He, however, forwarded his annual address, which was read by Dr. Marsden of Quebec.

Gentlemen,—The next thing in the order of proceedings is the address of the President. Last year Dr. Parker extended his observations over such a very large field, embracing almost every possible subject, that I really find but little left to comment upon or suggest. There are, however, one or two points upon which I would like to touch briefly.

THE "BILL."

It is to be regretted that little or no progress was made last session with the Medical Bill. It will again be submitted to-day for your consideration, and in its discussion it is very much to be desired that all sectional or private interests may be laid aside. The question is not this province or that; this school or the other. We are here to discuss and adopt such a Bill as will conduce most to the public good and the elevation of our own profession. Let me, therefore, bespeak from the members of this Association that reciprocal kindliness of feeling which will tend greatly to the peace and harmony of the meeting, while it will expedite the business in which we all are so interested. Medical education is, without doubt, the most important subject that can occupy the attention of a body like this. No argument of mine is necessary to show that this must be the foundation of the professional character in every country. I trust, therefore, that the Bill now to be considered, and which has for its object the advancement of medical education in this country, will be sufficiently advanced at this session that it may be laid before Parliament at its next meeting.

CLINICAL INSTRUCTION.

On looking over the curriculum to be enjoined on medical students I am struck with the small amount of time given to clinical instruction. Although two courses of three months, upon clinical medicine and clinical surgery, are all that is required at most of the recognized schools, still a moment's reflection will satisfy any one that this is far too little. Clinical instruction, as now conducted, is made subordinate, and, as it were, a secondary branch, instead of being put forward as one of the most important and most indispensable subjects of professional instruction.

The importance of demonstrations in lectures upon all subjects, medical or otherwise, requires no proof, and surely no demonstration can be so effectual to the medical student as the illustration

of the remarks of the professor, by an exhibition of the patient in all the different phases of the disorder.

HOSPITAL FEES MUCH DIMINISHED OR ENTIRELY ABOLISHED.

Again, not only should the number of clinical lectures in the different schools be increased, but greater facilities should be afforded to the student to prosecute his studies at the bed-side. For this purpose the hospital fees should be much reduced, or, if possible, entirely abolished. With regard to this matter I am happy to say that in Quebec we have taken a step in the right direction. Our hospitals are almost free, while the number of clinical lectures on medicine and surgery, apart from those given on diseases of the eye, amount to 360 per annum—240 only are required by law.

IMPORTANCE OF HOSPITAL ATTENDANCE.

I believe the student cannot too soon commence his attendance at the hospital, and although his medical education may not be sufficiently advanced to enable him to profit by this attendance to its fullest extent, still, if he is observant he will pick up much which will be invaluable to him hereafter, and he will learn much which will render the lectures he will receive later on in the College far more intelligible, and, therefore, far more profitable than they would otherwise be. To the same effect is the language of the great Trousseau. Addressing his class, he says, "Clinical instruction should not be deferred till near the end of the student's curriculum. From the day on which a young man determines to be a physician he ought to attend the hospital. It is essential to *see—to be always seeing*—sick persons. The heterogenous materials, though amassed without order, are, nevertheless, excellent materials. They may be for the present useless, but at the later time he will find them stored in the treasure-house of his memory." And they will become of incalculable service to him.

HOSPITAL HOUSE-SURGEONS.

Let me here throw out a hint which, if acted upon, might be of advantage to our students in all the different schools. I allude to the situation of house-surgeon in our various hospitals. Hitherto, I am of opinion, these officers have retained their appointments too long, to the exclusion of others to those advantages which they themselves (it is to be presumed) no longer require. In each hospital I would like to see a house-surgeon and an assistant-house-surgeon. The former should be a licensed practitioner, the latter a student in his fourth year, who, if found qualified, should succeed his chief the following year, on being received. By this arrangement each house-surgeon would spend two years in the hospital, a

stimulus would be given to the students, and a larger number would benefit by the advantages thus afforded. I do not hold positively to the periods here laid down, but I believe the hint here thrown out might be acted upon or modified to the great advantage of our students.

TRIMESTRIAL EXAMINATIONS!

Again, in the interest of the students, there is yet another point upon which I would touch. My colleagues and myself can testify to the immense amount of labour which this entails upon the professors, but we can also testify to the immense advantages it affords the students—and herein we are amply repaid. These examinations are conducted by a Committee of the Faculty, each professor examining on his own branch in the presence of his colleagues. At Laval there are three terms in each year; consequently the student undergoes twelve of these almost public examinations in the course of his four years' study. The advantages to be gained by the student are: first, and perhaps above all, a strong inducement to him to commence his studies in earnest the very day he enters college; secondly, by these examinations he discovers whether his lectures or private reading has been profitable to him or not; and lastly, he learns to appreciate and to take in the full scope of his professional questions, and by frequent habit he obtains a facility of answering. The quality of examinations above alluded to are, of course, in addition to the usual weekly examination in each class.

THE COURSE OF STUDY.

The course of study is, I see, to extend over a period of four years. This is not too long; but, perhaps, it would be well to specify distinctly in the Bill that no degree, *ad practicandum*, shall be conferred before the full expiration of his term.

It has been suggested by the Association of Medical Superintendents of American Institutions for the Insane, that in every school of medicine conferring degrees a course of lectures should be given on insanity and medical jurisprudence as connected with disorders of the mind. As most of the cases of insanity, in their early stages, come under the care of the ordinary physician, that is, perhaps, a subject which may advantageously occupy the attention of the different collegiate councils in this Dominion.

Last year Dr. Parker directed the attention of this Association, in very earnest language, to the necessity of establishing institutions for the treatment of inebriates. It is very much to be regretted that up to the present moment the Government of this Dominion has taken no action in this most important matter. It

is true that Mr. Wakeham, with than enterprise and intelligence which have always characterized him, did, some years ago, at his own risk and cost, open an institution In the neighbourhood of Quebec for the purpose alluded to, and has maintained it ever since upon a most respectable footing, though, I fear, at a considerable pecuniary loss. This he has borne in the hope—hitherto a vain one—that Government would ere this have come to his assistance. It is also true that an Act passed by the Local Legislature in 1869, authorizing the interdiction of inebriates, so that now these persons may be controlled and sent to such institutions for treatment. So far so good; but still this does not exonerate the General Government from the great responsibility which lies upon it in this matter. I agree entirely with your late President that all governments are as much morally bound to make provision for this class of sufferers as they are to find hospital accommodation for the treatment of other forms of disease, whether of the mind or body. It will, no doubt, have been seen by many of you that Drs. Parrish and Dodge, Superintendents of the Sanitariums of Binghampton and Media, have been formally invited to appear before the British Parliament to give a detailed history of Inebriate Asylums in the United States; the system of treatment adopted in them, and its success. This is a most praiseworthy step on the part of Great Britain, and will be followed, no doubt, by other governments; our own, may it be hoped, included.

There is yet another subject to which this Association might call the immediate attention of the Government.

INSANE EPILEPTICS.

As the law now exists no insane person, however violent, (*being also an epileptic,*) can be admitted into the public asylums of the country. The consequence is our gaols contain several of these doubly-afflicted persons, who are exposed to the jeers and gibes of those around them, inducing, no doubt, very frequently, epileptic paroxysms, which, under more favourable circumstances, might have been avoided. Why an insane person, because he is also an epileptic, should be less dangerous to himself or others, or require less the protection of Government for the same reason, I am at a loss to understand. On the contrary, being doubly afflicted, he should be a special object of sympathy, care and protection. I believe this matter has only to be brought under the notice of the Government to be at once remedied. There are some other points upon which I might dwell, as, for exâmple, the better regulating of the duties of chemists and druggists in large cities, medical fees in courts of jurisprudence,

coroner's inquests, &c., &c.: but as there is a good deal of work before the Association, and but little time to do it in, I prefer waiving these so that we may proceed at once to the discussion of the Bill.

Dr. Howard moved the acceptance of the address of the President, and that it be published amongst the transactions of the society in the usual way.

Dr. Campbell seconded the resolution, which was agreed to.

Dr. Trenholm, Dr. Howard, Dr. Worthington, and Dr. De Bonald announced their intention to read papers to the society during the session.

Dr. Marsden pointed out that through many members not paying their fees the society was unable to publish the valuable papers that were read at the meeting. For instance, last year Dr. Howard read a most valuable paper, full of statistics which were of priceless value, but they were practically a dead letter. For that reason he gave notice that during the meeting he would move to increase the fee.

The Nomination Committee was then elected and the meeting proceeded to

THE MEDICAL BILL.

Dr. Howard, the Chairman of the Committee on the Medical Bill, then brought the subject under the consideration of the house. He said that it would be in the recollection of some of the members of the association that at the meeting held in the City of Toronto, in Ontario, which was a very large and influential meeting, a resolution was almost unanimously passed, appointing a committee to draw up a Dominion Medical Act, the object of which was to render the system of medical education, medical examination and registration, uniform throughout all the Provinces of the Dominion. The Society at that time seemed to have imbibed the spirit which was so rampant in political society respecting confederation. It did not require very much forethought, nor did it require very much sagacity to see what a great boon it would be to the medical profession generally to have a system of admission to the portals of the practice of medicine throughout the whole of Canada uniform. Amongst the best minds at that meeting, the oldest and most matured minds, there was a general consensus that it would be a great boon to the profession if the young men in all the provinces had gone through a somewhat similar course of instruction, so that there should be the same standard of education, both preliminary and scientific. Starting with that great general principle, it was determined to

get a representation of the interests of each province and each university, which should form a committee to consider the subject. After a year's labour a bill was presented at Ottawa as the result of the operations of that committee. In the discussion of the subject it was right to say that a very active part was taken by the members of the profession of Montreal. It so happened that he was appointed the chairman of that committee, and that being a very important post he naturally consulted with the influential members residing in Montreal. They had several meetings which were attended—some of them—by gentlemen who were not members of the committee, and at one meeting the committee framed the measure in the shape in which it was presented to the meeting at Ottawa. Inpependently of those meetings he (the chairman) had held extensive correspondence with gentlemen in the various provinces, and all the suggestions thrown out by those persons were embodied, as far as they could be, in the bill, when it was presented at the Ottawa meeting. At that meeting it was agreed by general consent that only the great principles of the bill, the great matters upon which there might really be a difference of opinion, should be discussed, and the minor matters of detail left to be discussed afterwards. A series of very important amendments were adopted at Ottawa, altering very much the character of the bill. The number of representatives was altered, the proposal to have several councils was rejected, and it was agreed that there should be but one examining board, so that, as they would see, three very important principles in the bill were altered, though not, in his opinion, improved. It was then agreed that the bill, as amended, should be printed and distributed amongst the profession for discussion at the next annual meeting to be held at Quebec. At that meeting the bill was not seriously discussed, because of some difficulties caused by the amendments made not having been translated into French. What he asked the Association to do now was to proceed to discuss the leading clauses of the bill, so as to get an expression of opinion from that body, respecting the great principles involved in the measure, and not to attempt to take up all the clauses. He would mention further the clauses which he believed to be the principal ones. The fourth was that respecting the General Council, and, of course, was one of the most important clauses, dealing, as it did, with the number of members to compose it, and the proportion to be assigned to each province. Then clause twenty-one was one of the leading clauses of the bill, for it was one affecting the registration and determining whether a young man should not only hold a diploma from a university, but also pass an examination before the

Licensing Board, or whether the diploma should be sufficient. The twenty-fourth was important, empowering the Council to appoint a Board of Examiners. The twenty-fifth would naturally be one of these important clauses, for it decided who should compose the Examining Board, and what interests should be represented. The twenty-sixth also came under the same category, as it defined the powers of the councils in the matter of examining students, and the twenty-eighth clause which gave power to the Council to recognize or otherwise new medical schools. These clauses really contained the pith of the whole Act, and if they could agree respecting the principles involved in these clauses there would be no difficulty in arranging the details afterwards. Therefore, he moved that the Association should resolve itself into committee to proceed to discuss the bill.

Dr. Hingston seconded the motion, which was agreed to.

Upon going into Committee,

Dr. Botsford moved that the discussion of the bill be adjourned *sine die*.

Dr. Marsden, who acted as Chairman of the Committe, thought that the resolution was out of order, and the discussion of this question occupied the rest of the morning session.

In the afternoon there was at first only a small attendance, and therefore the discussion of the Medical Bill was postponed, and the time occupied by the reading of a paper by Dr. De Bonald on "The Extinction of Syphilis." He pointed out that all diseases could be divided into avoidable and unavoidable disease, and the disease in question was one of the former class, and could be radically cured. He advocated a plan by which a committee of medical men would be appointed, to whom a bulletin would be sent by all the physicians, specifying the number of their patients, their age and the number of persons affected; stating the mode in which the disease had been caused. By that means they would obtain the most exact statistics as to the number of cases and the causes, and if they could prevent any increase of contamination then the problem was solved, because in time those affected would die. In order to annihilate spontaneous syphilis it was necessary for political economy and hygiene to apply themselves and to eradicate contagious syphilis therapeutics must apply itself. He then pointed out that the great means of extinguishing the disease was by increasing the vitality and powers of the race. Study, observation, science and morals were the bases upon which the ills of humanity would be removed, and if the medical profession were to apply themselves to the work, and be unconditionally supported by the other branches of society, much good would be done. The

lecturer concluded by advocating a system of compulsory licensing and compulsory examination, such as prevails in France.

Dr. Tessier thought that the question was a most interesting one, but it was oue in regard to which the people seemed to be asleep, though it was cutting down the manhood of the country every day. He strongly doubted the practicability of the proposal as to statistics, but to put the houses of ill-fame under the control of the police would have a good effect in diminishing the disease. He thought that the meeting was indebted to the lecturer for bringlng the subject before the society, for the study of the subject would do a great deal of good, and moved a vote of thanks.

Dr. Hudson seconded the resolution.

Dr. F. W. Campbell then read the report of the Committee on Canadian Medical Necrology, as follows:

MONTREAL, September 11, 1872.

The Committee upon Canadian Necrology beg to report that death has taken away two prominent members of the Association during the period which has elapsed since its meeting in Quebec last year.

First on the list is the name of William Fraser, M.D., L.F.P. and S., Glasgow, one of the foremost physicians of Montreal, and Professor of Institutes of Medicine McGill University, also an attending physician of the Montreal General Hospital, who died on the 24th of July, after a very brief illness. Dr. Fraser had practised his profession in Montreal for nearly forty years, and was esteemed by all who knew him. His professional brethren looked upon him with confidence, as a sound and able practitioner, and his death is a loss not only to the profession of the city in which he lived, but to this Association, in which he took much interest.

Second on the list is one well known to all who have at all regularly been present at the meetings of the Canadian Medical Association—Jean B. Blanchet, of Quebec, whose death occurred on the 21st of July. At the organization of this Association, at Quebec, in 1867, he was one of the most active medical men present; and in the following year, when the Association met in Toronto, he was elected Local Secretary for the Province of Quebec. In 1870 and in 1871 he was re-elected to the same position, which he filled, throughout the whole term of his election, with the utmost fidelity and attention. Dr. Blanchet graduated at McGill University in 1863, and immediately went to England, taking out while there the diploma of the Royal College of Physicians, London. On his return he settled in Quebec, where he was rapidly gaining a first-class position. He had suffered for a year

or more from a troublesome malady which at length required surgical interference. In May of the present year he submitted to an operation at the hands of Dr. Hingston, of Montreal. His recovery quickly followed, but in a couple of months afterward another disease manifested itself which in a comparatively short time cut him off. By this death the profession in Quebec has lost one of its most prominent members, this Association one of its most indefatigable workers and supporters, as well as a painstaking office-bearer.

All of which is respectfully submitted.

FRANCIS W. CAMPBELL, M.D., L.R.C.P.L.,
Chairman.

Dr. Marsden moved that the report should be received and incorporated in the transactions.

THE MEDICAL BILL.

Dr. Howard then moved that the President should leave the chair, and that the house should go into Committee upon the Medical Bill.

Dr. Botsford moved in amendment, "That it is inexpedient to occupy the time of the Association with a discussion on the Medical Bill." He believed that one of the difficulties the Association had to contend against had been the discussion of the Bill. It had been before the house at several meetings, but even supposing that they could agree upon it, the question arose whether it would be received by the Legislature. It might be said they could only make the trial, but if, in making the trial, they took measures which were destructive to their institution, he would ask them why they should do it injury. In doing so they injured an Association which ought to range around it the intellect and numbers of the profession. Why was it that there were so few persons present that they might in reality say the Association was dying out? He thought that they would stand better in the estimation of the profession and the public at large, as a body of scientific men talking about scientific subjects, and they would do that better by coming in contact with each other, and hearing as to the investigations that had taken place as to the causes of diseases and scientific subjects. The humblest might be able to give them information which would be useful, and if they spent their time in that way it would be better and more beneficial than if they frittered away their time in attempts at legislation, which, when finished, might not be acceptable. For these reasons he thought that it would be better for them to throw out the bill and attend

to the business which would give them a standing in their own eyes, as well as in the eyes of the public at large. (Hear, hear.)

Dr. Trenholm seconded the motion, on the ground that there were not sufficient persons present from Ontario, there being only two present from that Province, where there were more than one-half of the medical men in the Dominion; and inasmuch as the bill which was contemplated was one intended for the whole Dominion, it was impossible that they could enter upon its discussion with the hope of obtaining any practical result. The most they could do was to act for Lower Canada, and they now had a plan which commended itself to the practitioners in the present College of Physicians and Surgeons.

Dr. Marsden thought that it was very evident that the bill, as it stood, was not going to be acceptable to all the profession. If they could carry the draft of a bill by any majority at that meeting, they could not go to the Legislature and present it as the sentiment of the Dominion of Canada. They could not say that it was the sentiment of Ontario, though they had a law there which was similar to the one proposed to be brought forward, and which was a very excellent one indeed. He had been looked upon with suspicion for saying that it was an excellent bill and would kill out the homœopathists and Eclecticists, but it had done so. At present he thought that the Province was in as good a position, for it was not sufficiently advanced for such a bill, and therefore he had been anxious that the proposed bill should be discussed on its merits. But he did feel that, seeing there were only two gentlemen from Ontario, even if they carried their proposal, they could not go with any grace to the Legislature and present it for the Dominion, as it would be opposed by the Ontarians. In medicine, as in politics, these unfortunate divisions were the ruin of everything, and therefore he hoped that the discussion would be postponed *sine die.*

Dr. Grant, M.P., said he gathered from the expression of opinion of a meeting of the profession of Ontario, and also from the opinion of men outside the Association, that there was but one feeling there, and that was opposition to the contemplated bill. For his own part he should like to see some bill which would meet the requirements of the profession generally, but he was satisfied that the profession in Ontario was averse to any legislation which would interfere with the bill they now had. At the introduction of the the new Ontario bill he was opposed to it, but although he was as strongly opposed as he could be to it, yet he knew that since its passing not one homœopathic or eclectic practitioner had graduated in the Province of Ontario. Prior to the passing of that

bill no less than from twenty-five to thirty graduated annually, and obtained as good practices as men who had graduated honorably in a university. He was satisfied that if the bill had accomplished no other good, it had done a great benefit in putting down the principles of homœopathy and eclecticism, and establishing the principle that there was only one basis for entering the profession—an educational one, and not the flimsy basis on which homœopathy and eclectism rested. (Applause.)

Dr. Rottot expressed an opinion that whilst a common standard of medical education was desirable, it would be also advisable that each province should keep up its own medical schools. But we do not know why after maturing the bill for three years, they were to throw it away.

Dr. Hingston did not understand why they should now throw the bill away, after having done less than nothing. If there was any necessity for a bill of this kind three years ago, there was now a still greater necessity for it. They had a bill in Ontario and in Nova Scotia, so that there was nothing like uniformity in medical education. A graduate of Quebec was a graduate in Quebec alone, and had no right to practise in Ontario, and he should like to ask if, after confederation, that was the position that such a graduate should maintain. He did not agree that the discussion of the bill had done harm to the society; on the contrary, he thought that it had done good. He had no doubt that New Brunswick and Manitoba would follow the example of Ontario and Nova Scotia, and then they would have five different schools sending out graduates with the power to practice in one province and not in any other, so that he thought that they should try and agree among themselves and obtain some uniformity, for it would become more apparent every day that it was required.

Dr. David said that if what Dr. Grant had stated were true, then it would be utterly impossible for them to carry the bill through Parliament, and therefore its discussion would be a waste of time. He was satisfied from what Dr. Grant had said and from letters he had received from Ontario that the reason the members from Ontario had not attended was that they had felt themselves obliged to oppose the bill, which they did not want to do. Under these circumstances he thought it was a mere waste of time, money and labour to go on discussing the bill. He regretted it, because he thought it was not only shameful, but small for the other parts of the Dominion to pass laws preventing medical men from one province practising in another.

Dr. Howard pointed out that the bill had been modified to suit the wishes of Ontario, and now was nearly a counterpart of the

law in that Province. He believed that they could settle the grave questions at issue in a very short time, and much more easily than they could ten or twenty years hence.

After a few words from the President,

The amendment was put and lost and the original motion carried, and the Association went into Committee, Dr. Marsden presiding.

On the preamble, which declared it to be expedient that the laws and regulations for the education, examination and registration of medical practitioners in the Dominion should be uniform.

Dr. Rottot objected to it on the ground that it placed the control of the education of medical practitioners in the hands of the Federal Government, and infringed the privileges of other provinces which he thought objectionable. Therefore he moved that this Association, although desiring that the laws and regulations concerning the examination and registration of medical men should be uniform and similar in all the Provinces of Canada, nevertheless rejected the principle of the contemplated Medical Act which puts the preliminary and medical under the control of the Federal Government. He was in favor of laying down some basis of education and then leaving each province to carry it out.

Dr. Lemoine seconded the proposition of Dr. Rottot.

Some discussion ensued upon the question, and upon a division the amendment of Dr. Rottot was put and lost, the votes being 11 for and 17 against it.

The preamble then passed, and the Association adjourned at six o'clock p.m.

THE DINNER.

In the evening the members of the Medical Association dined together at the St. Lawrence Hall. The chair was occupied by Dr. Scott and the vice-chairs by Drs. Hingston and Peltier. After an excellent dinner provided by the host of the St. Lawrence Hall had been disposed of, the chairman proposed the usual loyal and patriotic toasts, which were enthusiastically responded to. The toast of "The Members of the Association" was proposed, and responded to in admirable style by Drs. Hamilton of Nova Scotia, Botsford of New Brunswick, and Grant of Ottawa; and by Dr. Derby of New York. The health of "The Mayor and Corporation" elicited an admirable reply from the Mayor, and that of "The Vice-Chairmen" by Drs. Peltier and Hingston. "The Press" and "The Medical Profession of Montreal" having been duly honoured, that of "The Ladies" was given by Dr. F. W.

Campbell, and an exceedingly pleasant party broke up about midnight.

PROCEEDINGS OF THE SECOND DAY.

MONTREAL, 12th September, 1872.

The deliberations of the Association continued at the Natural History Society, the Vice-President, Dr. Hamilton, occupying the chair, in the absence of Dr. Sewell, of Quebec.

After the minutes of last meeting had been read the question as to the next place of meeting was put.

Dr. Marsden moved that the next place of meeting should be St. John, New Brunswick. By the time of the meeting they would have direct communication by steamer and rail. New Brunswick would like it, and the Association had not yet met in the Eastern Provinces, and he believed that their going there would be attended with very beneficial results, and promote the great cause they had in hand. He believed that it would probably hasten the results that they all wished heartily to bring about, though they did not agree as to the details. It might be that they would then be able to mature their project for a medical bill which would be acceptable to the whole country.

Dr. Hamilton, of Ontario, seconded the resolution.

Dr. Hingston expressed a hope that at the next meeting the greater part of the time would be devoted to the reading of papers on scientific subjects, and their discussion.

Dr. Botsford said that he was very glad that the proposition had come from Dr. Marsden that the next place of meeting should be St. John, N. B. When he left St. John he was told to urge that that city should be selected as the next place of the meeting. There was one advantage in the selection of St. John, that the weather was more cool than in the interior of the country, and the hotel there was equal to any other in the Dominion. By selecting the Maritime Provinces they would enjoy a pleasant trip, and would, at the same time, be able to attend to their business. In conclusion, he stated that he could say, on authority, that by next year the communication would be direct, either by steamer or rail.

The resolution was then put and carried.

Dr. Trenholm observed that September was rather an inconvenient time for holding their meetings, as many of their patients returned from the sea-side during that month. He believed last year that the time should be altered to June or July, and gave notice of his intention to move an alteration of the by-law, and

therefore he moved that hereafter the annual meetings of the society be held on the second Wednesday of July each year.

Dr. Marsden seconded the proposal.

Dr. Hingston thought the motion pledged the Association for all the future, whereas he thought that they should confine themselves to the next meeting. It would be better for them to fix the time each year, and for the next year he would suggest that the time should be the first week in August rather than the second in July, because a great many people did not leave Montreal till then.

After some discussion Dr. Hingston moved, and Dr. Gilbert seconded, that the time of holding the next meeting should be the first week in August.

On the question being put, the amendment was carried, and the next meeting will be held on the first Wednesday in August 1873.

Dr. Botsford submitted the following report:

The Nominating Committee have unanimously agreed to submit the following gentlemen to the Association for election to the respective offices:

Dr. Grant, M.P., President; Dr. McDonald, of Hamilton, Vice-President for the Province of Ontario; Dr. Marsden, Vice-President for the Province of Quebec; Dr. C. C. Hamilton, Vice-President for the Province of Nova Scotia; Dr. Stenes, Vice-President for the Province of New Brunswick; Dr. Peltier, General Secretary of the Association; Dr. Berryman, Secretary for Ontario; Dr. H. Blanchet, Secretary for Quebec; Dr. Gordon, Secretary for Nova Scotia; Dr. Earle, Secretary for New Brunswick; Dr. Robillard, Treasurer.

Prize Essay Committee.—Drs. Hingston, Hodder, Wm. Bayard, Larue, Yates, and A. P. Reed.

Committee on Medical Education.—Drs. Howard, Rottot, Worthington, James Sewell, Canniff, Ogden, Dickson, McGillivray, Botsford, Earle, Tupper, and Parker.

Committee on Medical Literature.—Drs. Black, Fenwick, Dagenais, Marsden, Larue, Bethune, McIntosh, Fulton, Oldright, Freeman, George Hamilton, and Wickwiré.

Committee on Necrology.—Drs. F. W. Campbell, Workman, Larue, DeWolf, and Harding.

Committee on Publications.—Drs. David, Robillard, F. W. Campbell, Trenholm, Dagenais, Hingston and Peltier.

Auditing Committee.—Drs. Fenwick, Peltier, and Scott.

J. B. Botsford, *Chairman.*

Dr. Trenholm moved the adoption of the report, which was seconded by Dr. Botsford, and carried.

These gentlemen were then unanimously elected to the several offices.

The President observed that, according to the fourth article of the constitution, it was provided that the President and Vice-Presidents should enter upon the functions of their respective offices at the beginning of the next meeting, and the other officers immediately after election. He should give notice that at the next meeting he would move to alter the constitution so as to apply the same principle to the other officers as now applied to the President and Vice-Presidents.

THE MEDICAL BILL.

Dr. Howard said that before asking the society to consent to what he was about to do he would like simply to state why. As they were aware, at last, by a final vote they had obtained an expression of opinion from an influential portion of Lower Canada respecting the principle involved in the bill. After a good deal of debate, and after much having been said upon the question, they at last got a formal motion from Dr. Rottot, representing a very large and influential portion of the French Canadian practitioners in medicine in Lower Canada to the effect that as a whole they objected to the bill which would be a Dominion bill. Whilst they were willing to have a bill for each province they did not feel disposed to adopt the principle which would ultimately confer upon the Federal Government the jurisdiction in medical matters. That, of course, was what he was aiming at, and what they had been working to obtain for the last three years. It was evaded at Ottawa because there was not an attendance from this province. It was postponed at Quebec because the amendments were not translated into French, and yesterday it was almost choked by a vote to suspend the discussion of the subject. Fortunately, now, by the good taste of Dr. Rottot, the discussion was brought on, and subsequently a formal vote of 11 to 17, at a very small meeting, was obtained on the principle contained in the preamble. But the minority represented plainly the feelings entertained by a very influential portion of the French practitioners of Lower Canada. He, as a Lower Canadian, did not feel that it would be right in him to take any further active part in advocating a bill which was not acceptable to his compatriots here. It would be futile for them to go before the Local Legislature to obtain a bill which would not be acceptable to a large and influential portion of the profession. Having at last obtained an emphatic opinion from Lower

Canada, he proposed, with the consent of the Association, as the chairman of the committee in charge of the bill, to withdraw its further discussion, and he requested permission for the committee, having reported, to be discharged. He hoped the Association would see the propriety of that proposal. As a Dominion bill, it could not be discussed at present, and therefore he hoped it discussion would be withdrawn. He need not say that it was a very great disappointment to him, but then there was nothing but disappointment in this world, in medicine as in other matters.

Dr. Trenholm seconded the resolution, but he did it with great regret, because he thought the French practitioners did not appreciate the position.

Dr. Howard remarked that it would be more acceptable to him to have some other gentleman second the resolution, because Dr. Trenholm had tried to choke the discussion of the bill. Dr. Hingston had seconded his original motion, and therefore he hoped he would second the present one, because it would be in better taste after what had transpired.

Dr Hingston said he would do so, not with pleasure, but with pain, but he would merely suggest that the bill should stand over for a couple of years, after which, perhaps, they might be able to smooth some of their little angularities.

Dr. Trenholm wished to remove any impression of inconsistency in his conduct in seconding the resolution: His reason for trying to suppress the bill was that it was clear that it could not be carried, and so its discussion could only be a waste of time. He had not in the slightest degree changed his opinion as to the necessity for such a bill.

Dr. Howard said that while he left it to the society to be decided whether the bill should be dropped or only postponed, he must retire from the position as chairman of the committee. He had many reasons for doing so, but one very strong one was that from his position as the chairman the bill bore the impress of his hands. If the committee was to be continued he would suggest the name of Dr. Craik to be substituted for his own.

Dr. Rottot observed that he did not oppose the bill as a whole, as he thought there was a great deal of necessity for such a bill, but he objected to some of the provisions of the measure. He hoped, however, that Dr. Howard would continue to act as chairman of the committee, for he was at the head of his profession, and his services were of the greatest value.

Dr. Rousseau also hoped that Dr. Howard would not retire.

Dr. Howard thought the bill should be given up, because it would not be lost, as he felt assured that the law of Nova Scotia

was due to the labours of that Association. For that reason he thought that the gentlemen who maintained that the time of the Association had been misspent in the discussion of the bill, and that the time would have been better applied to the discussion of scientific subjects were mistaken. The late President of the Association, who took an active part in the formation of the Nova Scotia Bill, also took part in the formation of the measure under discussion, and had been very anxious to have the measure drawn before the introduction of the Local Bill in Nova Scotia. He (Dr. Howard) thought that they should withdraw the bill because the Province of Quebec, which was the only one in which there could be any great difference of opinion, had spoken emphatically against the principle of the bill.

Dr. Hamilton moved that the further consideration of the medical bill prepared for the Association by the committee, at the request of the Association, be deferred for two years.

Dr. Rousseau seconded the resolution, which was carried.

Dr. Howard moved that the special committee be discharged.

Dr. Gilbert seconded the resolution, which was lost on a division.

Dr. Rousseau proposed a vote of thanks to Dr. Howard for his arduous labours in preparing the bill.

Dr. Worthington seconded the resolution.

A LIBERAL OFFER.

Dr. Marsden announced that he had the honour to submit an offer which must be very gratifying to the Association, as it would tend to make the next meeting very interesting. Dr. Grant, M.P., and Dr. Worthington, had offered to the Association a gold medal for the best essay on the zymotic diseases of Canada, the essays to be submitted to the Essay Committee of the Association, without signature, with an appropriate motto, before the first day of July next, and to be presented to the next meeting of the Association. (Applause.)

THE SUBSCRIPTION.

Dr. Marsden gave notice that at the next meeting he would move that the subscription be $4 in future.

PAPERS.

Dr. Howard then read a very able paper on Scarlatina Pleurisy, which was followed by some discussion; and,

On motion of Dr. Marsden, seconded by Dr. Campbell, a vote of thanks was accorded to him, and the assembly adjourned for lunch.

In the afternoon, Dr. Grant, the newly elected President, took the chair, and Dr. Marsden then gave notice that at the next

meeting he would move that the by-laws should be amended so as to enable the Association to strike off the roll of the members of the Association all permanent members as had been absent from three consecutive meetings and had failed to pay their subscriptions.

Dr. Wright thought the members from the Upper Provinces would not attend the meetings so long as they were held in the fall months of the year.

Dr. Botsford thought it was very important for the welfare of the Association that the whole Dominion should take an interest in it, and that any steps that could be taken should be to maintain that interest. It would be a pity if a large section of the profession were to shut out practically from the Association because of the time of the meeting.

Dr. Marsden gave notice that at the next meeting he should move that the time for holding the meeting should be reconsidered.

Dr. Hingston then gave a description of a case on which he had performed an operation for the removal of a double hair lip, the patient being present was shown to the society.

Dr. Fenwick then read a paper upon sixteen operations of lithotomy which he had performed, and all of which were successful.

Dr. Hingston congratulated Dr. Fenwick upon the success he had had in not having met a single fatal case. It was very gratifying to know that in Canada the statistics in these operations would compare with any part of the world, but the success that Dr. Fenwick had achieved through his coolness and ability was not by any means the average.

Dr. Marsden thought that the successful results of Dr. Fenwick's operations showed that the surgeons of this country were advancing in science.

Dr. Botsford expressed an opinion that the ailment of stone in the bladder was very rare in New Brunswick.

The President observed that in Ottawa, during a period of thirty years, there had only been three cases of stone in the bladder. The cases, as they saw, were very rare in that part of the country, and these that had happened had turned out very well. In one case, at the Catholic hospital, no less than eighty-nine calculi were removed at one time.

Dr. Hamilton believed that in Nova Scotia the disease was still more rare than in New Brunswick. In a practice of thirty-eight years, in a growing town in the County of Kings, he had never heard of a case. Their soil was based upon sandstone and the water was good.

Dr. Fenwick stated that the majority of his cases had been in persons residing in the City of Montreal.

Dr. Gilbert stated that the disease was of extreme rarity in the Eastern Townships, and he could only rembember one case in twenty-eight years. Perhaps it might be that the soil in the neighbourhood of Montreal was more clayey than in the Eastern Townships.

Dr. Hingston then read a paper upon Lithotitry, in which, after giving his experience in cases, he stated that he believed that the disease was becoming much more frequent, because he has performed all his operations, both in lithotomy and lithotitry, in the last eight years, and during that period he had performed these operations on seventeen occasions. From the frequency with which other gentlemen, also, had operated, he was led to the belief that the disease was becoming much more frequent, and it was an interesting question to know what was the cause of that undue frequency.

Dr. Marsden thought that the fact was not so much that the disease was more frequent, but that there were more skilful surgeons in the country. In the old time surgeons feared to perform the operation, and frequently let the patients wear themselves out by pain and suffering rather than risk it, whereas now there were so many able surgeons that the operation was performed at once.

Dr. Robillard stated that Dr. Robert Nelson had, to his knowledge, performed the operation many times when he resided in this country.

Dr. Fenwick said that the opinion of Dr. Nelson was that the disease was very rare in Canada, as most of his cases had been in persons from abroad.

Dr. Marsden moved a vote of thanks to Drs. Fenwick and Hingston for their papers.

Dr. Robillard second the resolution, which was carried unanimously.

Dr. Hingston observed that Dr. Howard, Dr. Fenwick and himself had prepared these papers, not because they thought that the papers were of especial interest, bus to set a good example, in the hope that in coming years others would follow their example and give increased interest and usefulness to the Association.

Dr. Marsden proposed that the resolution as to the Prize Essay Committee be rescinded, as the gentlemen appointed lived in different localities, and that the papers to be sent for the competition of the gold medal offered by the President and Dr. Worthington be examined by a committee consisting of the following gentlemen: Drs. David, Howard, Fenwick, Rottot, and Peltier.

Dr. Hamilton seconded the resolution, which was unanimously carried.

Dr. Freeman moved, and Dr. C. S. Hamilton seconded, "That the members of the Association resident in St. John, New Bruns-

wick, be a Committee of Arrangement for the next meeting," which was agreed to.

Dr. Hamilton moved a vote of thanks to the railway and steamboat companies who had given facilities to the members of the society to attend the meeting at single fares.

The resolution was seconded and carried.

The Treasurer reported that there was a balance of $22.04 in favour of the society.

Dr. Hingston suggested that it would add very much to the interest of the Association's meetings if the members gave addresses on medicine, surgery and midwifery.

Dr. Hamilton thought the Association should appoint a committee on the various subjects, whose duties it should be to see that papers were prepared for the meetings. Therefore, he gave notice that at the next yearly meeting he would make a motion to alter the constitution so as to have committees to arrange for addresses.

The President said that if they were to be a working body, and desired to accomplish anything, the sooner they began work the better. They had spent five or six years in the discussion of the Medical Bill which had now been found an abortion. It would be well if, for the next meeting in the Maritime Provinces, they had addresses on a few of the more important departments of medicine. If they could get the co operation of some of the members of the profession to obtain addresses upon surgery, surgical pathology, medicine, and sanitary science, it would be very desirable, and add much to the interest of the proceedings of the Association.

Dr. F. W. Campbell moved, seconded by Dr. Fenwick, that the following gentlemen be requested to give addresses at the next meeting at St. John, New Brunswick: Medicine, Dr. R. P. Howard: Surgery, Dr. Hingston: Midwifery, Dr. Hodder: Hygiene, Dr. Botsford. Carried.

Dr. Hamilton suggested that a committee should be appointed to consider the amendments necessary in the constitution and by-laws, and report to the next meeting.

Dr. Marsden moved that the committee should consist of Dr. Hamilton, Dr. Gordon, and Dr. Botsford.

The resolution was seconded and carried.

Dr. Hamilton proposed a vote of thanks to the medical gentlemen of this city for the very handsome manner in which they had entertained those who had visited them from a distance. He could say, with a good deal of satisfaction, that he had never met with so warm a reception as he had received on the present occasion, and he should remember it with great pleasure in the future. Therefore, he moved "that the thanks of the medical gentlemen from a distance be given to the medical gentlemen of Montreal for the very handsome manner in which they received them."

Dr. Marsden seconded the resolution, which was carried.

Dr. Hingston moved "that the thanks of the meeting be given to the officers of the Association for their services during the past year, and that the special thanks be given to the Secretary, Dr. David, for his services for the past three years. He added that although he knew that Dr. David must be glad to be relieved from his labours, he very deeply regretted his withdrawal from the post.

Dr. Fenwick seconded the resolution, bearing testimony to the value of Dr. David's services.

The resolution was carried.

A vote of thanks was also passed to the Natural History Society for the use of their rooms.

The President. said before separating he wished to return to the Association his very sincere thanks for the honour they had conferred upon him in electing him their President. When he came to Montreal on the present occasion he had not the slightest idea that so great an honour would have devolved upon him, inasmuch as when he entered the room yesterday he saw the "household gods," as he might term them, of the profession assembled; inasmuch as he knew that Montreal was the great metropolitan centre, as far as the practice of medicine was concerned, in the whole Dominion of Canada. He felt proud that a young country such as we had—young, it was true, but extensive as to territory, extending from the Atlantic to the Pacific—should have men who take a prominent part in the profession of medicine. He regretted that the honour had not devolved upon some individual who would have been better able to have performed the functions of President of so distinguished a body than himself. He felt, however, that although young in years, he should endeavour to do the utmost he could in order to give the society, as far as possible, a return for the confidence they had placed in him. He was exceedingly pleased that Dr. Hingston had thought fit to move in a direction which, he was satisfied, would be materially conducive to the prosperity of the Association. He knew perfectly well that since the British Association was inaugurated no department had taken a more prominent position than that in connection with medicine. They were well aware that they could only judge as to the advance in the various departments of medicine by the ideas brought out by the men who were leaders in their various departments, and which were admirably explained in the addresses delivered, such as those given during the meeting at Birmingham. He was perfectly satisfied that by the addresses to be given next year, as specified in the resolution of Dr. Campbell, great good would be done, not only to themselves as a body in this Dominion; not only in advancing the material interests of the Association, but at the same time showing to their brethren on the other side of the line, who had done much towards advancing the prosperity of the profession in the United States, that we were a progressive people, so far as the profession of medicine was concerned in the Dominion of Canada, and that we were determined to keep pace with the times. (Applause.) And more than that, their brethren on the other side of the Atlantic would feel proud to render them any assistance they could when called upon to co-operate with them. He hoped that the day was not far distant when they would not only be a united body throughout the length and breadth of the Dominion, but also in the United States and Great Britain, so that they might take the position their profession deserved from one end of the universe to the other. (Applause.)

The President then appointed Drs. Hingston, Marsden, Campbell, and Trenholme, of Montreal, as a deputation to the United States Association

Dr. Hamilton suggested that the Association should petition Parliament in favour of establishing inebriate asylums.

Dr. Marsden thought that was a subject which should be discussed at the beginning of a meeting, and not at the end of one.

The matter then dropped, and the Association closed its deliberations.

Reviews and Notices of Books.

Sciatica, Lumbago, and Brachialgia; their Nature and Treatment, and their Relief and Rapid Cure by Hypodermic Injection of Morphia. By Henry Lawson, M.D., Assistant Physician to St. Mary's Hospital, and Lecturer on Physiology in St. Mary's Hospital Medical School. 8vo.; pp. 200. London: Robert Hardwicke, 192 Piccadilly. 1872.

Dr. Lawson has given us an excedingly readable book. The style is somewhat peculiar, but the interest of the subject under discussion is maintained throughout. We were somewhat startled at first, in the title of the book—we allude to the assertion that the diseases under discussion are immediately relieved and rapidly cured by hypodermic injection of morphia, for we feel certain that it is not always a permanent cure in that malady. We have seen cases which have been relieved and apparently cured by that line of treatment, and again we have seen others which resisted this, as well as other methods of treatment. Indeed, we were ourselves a sufferer from Sciatica, which confined us to bed for the greater part of three weeks. The attack lasted six or eight months. In this attack hypodermic injections of Battley's sedative solution gave the greatest ease and comfort, relieving us of that dull, aching pain peculiar to the disease. The after consequences of the administration of opium, such as headache and nausea, did not follow the hypodermic injection, although if we take opium in any other way it is followed by twenty-four hours of discomfort and misery. But we did not attribute our cure to the hypodermic injection or any medication whatever, so much as to the returning heat of summer, the free use of tonics, together with abstinance from all causes of excitement or worry, and careful attention to diet, and general sanitary regulations.

Dr. Lawson explains that he was induced to take up the subject of Sciatica from the fact that he supplied in his own person what he believed "to be the most obstinate and dangerous case of this affection," and certainly to read the cases reported, and the success (almost marvelous) of his treatment by hypodermic injection, will induce the reader to give his peculiar method of treatment a fair trial.

The work is divided into ten parts or chapters. In Part I. we

have general considerations. He alludes to the want of knowledge of the true pathology of the disease itself, and gives a fair and truthful description of the errors in diagnosis which have been made where Sciatica has been confounded with other maladies, such as rheumatism, morbus coxæ or degeneration of the nerve trunk. He combats the idea that the neurilemma is altered in condition, and states in Part II. "Sciatica is a disease of no rarity, yet only one or two cases have occurred in which the nerve has been examined." From the results of observation in these, it is concluded that, in all Sciatic cases, the nerve sheath is inflamed, swollen, and filled with gelatinous fluid. But is this fair? Is it less absurd than the generalization of that proverbial Frenchman who, finding the bar-maid of an English hotel red haired, immediately wrote down: "Englishwomen have red hair."

We fear Dr. Lawson lays himself open to a charge of unfairness, because the alteration in the neurilemma is not only rational, but rests on more than one or two dozen cases examined. It has been stated that "neuralgia has no pathology," if by this term we wish to indicate a structural change of demonstrable character. The difficulties attending an investigation of this nature must be taken into account, as it is unquestionably rare the chance of examining *post mortem* cases of disease of the nervous system belonging to this group, except in advanced stages, and, again, when opportunity serves, the pathological lesions require microscopic examination to prove their existence. With extreme modesty our author observes: "It is, perhaps, unwise to offer any speculation as to the part of the nerve primarily attacked; bnt, if I may be permitted to say so, I have a strong suspicion that changes of nerve structure commence in those delicate filaments which form such exquisite reticulations on the surface of the sarcolemma of the muscle." The lameness attending attacks of Sciatica is attributed by our author to "a disinclination on the part of the patient to move a muscle whose motion is extremely painful." Is this the cause of the wasting of the muscular fibre also observed? Surgeons are well aware of the consequences occasionally attending mechanical injury to nerve trunks, how these injuries are followed by partial paralysis of a limb, neuralgic pains, and muscular degeneration; on the other hand injury or changes in structure of the delicate filaments on the surface of the sarcolemma, and they must be of frequent occurrence in severe accidents, are not attended by disaster, repair takes place, and the usefulness of the limb is restored.

Part V. is devoted to the subject of treatment. The author remarks: "For convenience sake, it may be advisable to group the

methods of treatment under the four empirical heads of remedies administered: *a*, by the stomach; *b*, upon the skin; *c*, (1) underneath the skin, (hypodermically or subcutaneously), or (2) into the substance of the skin (endermically); and *d*, by hygienic measures." And he adds, "of these I need hardly say, for the title of the paper expresses it already, that the hypodermic method is the only one that I hold to have much real value in the therapeutics of Sciatica."

The author brings in review the various remedies which have been extolled as specifics, but although admitting the apparent benefit derived, in some cases, from the use of turpentine, arsenic, alkalies, acids, and the hypophosphites, he states they have failed, in his hands, to give relief. Iron, Quinine, and Cod Liver Oil, he regards as beneficial chiefly, not from any curative action they possess over the disease in question, but because they serve to "maintain the nutrition of the body, which the agonizing pain of the malady so greatly interrupts."

With regard to stimulants, he is in favour of a liberal use of alcohol, "whether as brandy or whiskey, in severe Sciatica." He condemns the use of sweet wines and malt liquors, and says: "I am as certain of this as I am of anything in therapeutics—the employment of alcohol in some pure form is to be uniformly insisted on in the treatment of Sciatica." Ether, Ammonia, Cannabis Indica, Belladonna, &c., are considered in turn. But purgatives he regards as positively injurious, "except in cases where the degree of constipation is such that their administration is imperatively demanded." We must say that we have seen the very greatest relief given by the one-eighth of a drop of Croton Oil, repeated every two hours until thorough purgation has resulted, and this not in cases where there had existed previous constipation.

The subject of electricity in these diseases is next considered. The author puts very plainly before the reader the various forms of electric vibration in use for medicinal purposes, and states that of all departments of modern therapeutics, the use of electricity is the least understood. This he accounts for from the fact that for years past this method of medication has been in the hands of quacks and charlatans, which has very naturally prejudiced honest men against it. He, however, fully admits the value of this means of treatment, and says, "I am prepared to say that we have in galvanism a remedy which, under other conditions than those under which it is now employed, will prove most valuable in the future."

We come next to what the author states to be the true,—

"almost the only remedy for Sciatica—hypodermic injection of minute quantities of Morphia. The author's directions are specific. He prepares a saturated solution of the Muriate of Morphia, grs. x., in ʒij. of distilled water. This so-called solution requires a temperature higher than that of the atmosphere of England in summer to maintain fluidity. We cannot see why the sulphate is not used which is more soluble, and by carrying it in the solid state can very readily be dissolved for immediate use. The dose he administers in ordinary cases is one-sixth of a grain, equal to two drops of his solution, and sometimes he repeats this three times a day or every eight hours; but why use it in so concentrated a form? surely a few drops more or less of water will do no harm. Dr. Lawson gives the results of sixteen cases treated by his method. He does not confine himself exclusively to the Morphia injection, but attends to the general health of his patients, and to some he gives Iron, Cod Liver Oil, Quinine, &c., &c. Finally, the author takes up the subject of Lumbago and Brachialgia, and gives the results of his experience.

We should desire to proceed further in our analysis of this little work, but already this notice has extended beyond our allotted space. We regard the views of the author as well backed up, and although not thoroughly convinced that Morphia is a certain and universal panacea for Sciatica and other neuralgic affections when hypodermically applied, we must say that our opinion of its usefulness has to a certain extent been modified by the perusal of this work, and that in the future we shall give it a fair trial.

In respect to the get-up of the book, it is printed on good, substantial tinted paper; the type is clear and well impressed, and is a credit to the publisher.

BOOKS RECEIVED FOR REVIEW.

A System of Surgery; Pathological, Diagnostic, Therapeutic, and Operative. By Samuel D. Gross, M.D., LL.D., D.C.L., Oxon; Professor of Surgery in the Jefferson Medical College, Philadelphia, &c., &c. Illustrated by upwards of fourteen hundred engravings. Fifth edition; greatly enlarged and thoroughly revised; in 2 vols; Royal, 8vo; Vol. I., pp. 1,098; Vol. II., pp. 1,170. Philadelphia: Henry C. Lea. 1872.

The Treatment of Syphilis with Subcutaneous Sublimate Injections. By Dr. George Lewin. Translated by Carl Proegler, M.D., and E. H. Gale, M.D. Philadelphia: Lindsay & Blakiston. 1872.

On the Functional Diseases of the Renal, Urinary, and Reproductive Organs, with a General Review of Urinary Pathology. By D. Campbell Black, M.D., L.R.C.S., Edin., &c. Philadelphia: Lindsay & Blakiston. 1872.

A Manual of Qualitative Analysis. By Robert Galloway, F.C.S., &c., from the Fifth Re-written and Enlarged London Edition, with illustrations. Philadelphia: Henry C. Lea. 1872.

CANADA

Medical and Surgical Journal.

MONTREAL, OCTOBER, 1872.

So much of our space is taken up with a report of the meeting of the Canadian Medical Association that we are forced to postpone some further remarks on the subject of Hygiene, principally in reference to the disposition of sewage, and, also, sewer ventilation. It is well known that decomposing animal and vegetable matter gives out a glutinous, or gelatinous matter, which may be seen floating on the surface of cess-pools. In a system of drains such as we possess, the insides of the pipes or drains are covered with this substance—a substance which is constantly in a state of ferment, yielding an enormous amount of a most poisonous gas. In our sewerage arrangements this vile and noisome gas is constantly contaminating the air we breathe. Each corner of the street contains a grating in direct communication with the sewer beneath, but the quantity of foul gas is so enormous that even these are not sufficient outlets, and a considerable amount is forced into our houses. Any observer can discover for himself the difference between the atmosphere of our city and that of the vicinity of our mountain. The cause is obvious—*dirt, neglect;* and the greatest and most fatal to the inhabitants of this growing city is the dirt and neglect of our sewers. They are hourly becoming in a worse condition, and if this state is allowed to continue much longer it will be a most dangerous undertaking to remedy it. It has been truly said that the time will come when it will be looked upon as a disgrace for a person to contract typhoid fever. It is well recognised by sanitarians as a preventable disease, but in this good city if we continue to dole out to the inhabitants an abundant supply of excrementitious air—a supply in quantity sufficient to contaminate the food we eat and the water we drink—we need not be surprised at a violent outbreak of typhoid fever, or of some other and more fatal plague, as a judgment from the Almighty for breaking laws which he has given us for our guidance. One of the processes of life is the conversion of food into sewage. It should be the aim of science so to utilize the sewage as to render the air pure; to

sweeten the water and fertilize the earth. To purify the air of human habitations it was found necessary to abolish cess-pools; hence the construction of large drains for the purpose of remedying the evil; but while the annoyance to our local habitations was to a certain extent ameliorated it has been found to be a grand mistake, not only in a sanitary point of view, but economically, as we are simply getting rid of a large amount of animal and vegetable matter which can be utilised, and which, under present circumstances, destroys the purity of our rivers, impoverishes our land, and, at the same time, renders pestiferous the air we breathe.

Death has been busy in the ranks of the profession. The celebrated Louis, of Paris, is no more. He died at the advanced age of 86 years. In London, England, Frederick C. Sky closed his mortal career on the 15th August, and more recently comes to us the announcement of the death of Alfred Poland, of Guy's Hospital.

CONFESSION NO PROOF OF GUILT.

The *Lyon Médical*, of April 28, 1872, refers to the case of girl aged twenty, supposed to be seven months pregnant. After an attack of hemorrhage her size seemed to have considerably diminished, and the girl, being closely questioned on the subject, said that, becoming aware of the discharge, she repaired to the closet, where she stayed ten minutes. She added that all had escaped, but that she had not time to look, as she was being called by her mistress. A midwife and the parish surgeon both declared that the girl had been recently confined. She was now again assailed with questions, and told that, for her own sake, she had better make a cleam breast of it, as no fœtus had been found in the closet. Perhaps, it was suggested, she had thrown it into the pigstye. The poor creature at first denied such a thing, but at last confessed that it was so. A search was made, but no child was discovered. She was tried for concealment of birth, on her own confession, and sentenced to six months' imprisonment. The girl had not been taken into custody in consideration of her free confession, and she quietly proceeded to the gaol. When admitted it was found that she was far advanced in pregnancy, and soon gave birth to a healthy girl. By the French law she could no longer appeal, as more than ten days had elapsed since the verdict: but the judge, having the power of appealing within two months, did so, and the girl was acquitted.

This case shows that confession, which is looked upon as the clearest proof of guilt, cannot always be relied upon. And what shall we say of the surgeon and the midwife? The examination was probably hurried and incomplete, and the conclusion arrived at on seeing the signs of recent abundant hemorrhage. This case, even in a simple obstetrical point of view, is full of valuable hints. —*Lancet.*

Dr. Fenwick's Case of Fibro Cystic Bronchocele.

LEGGO & C°. STEAM LITH. MONTREAL

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Introductory Lecture delivered at the Opening of the Fortieth Session of the Medical Faculty of McGill University, and the Inauguration of the New College Building. By WILLIAM WRIGHT, M.D., L.R.C.S.E., Member of the Surgical Society of Ireland, Professor Materia Medica in the University, One of the Medical Staff of the Montreal General and University Lying-in Hospitals, &c.

GENTLEMEN,—I thank you for your warm reception, and, in acknowledging it, let me assure you that the joy of meeting is mutual. Your Professors are as happy as you are at the introduction now taking place on this the first day of the session. And in return for your applause, which we accept as your greeting, I have great pleasure, in their name, in extending to you a most cordial welcome.

This day begins a future which, we trust, will enrich you with an abundant harvest of professional usefulness, and when a little while has rolled by we hope to place in your hand the sickle by which its golden fruit may be gathered into your garners; or, to change the figure, we trust that before a long while we shall bind you round our necks with our other esteemed jewels in the long lace of graduates who are our sons in Medicine.

May the morning you first crossed these halls of learning be ever a red-letter one in your life's calendar. May enthusiasm so swell at the remembrance of the time spent here that you will be eager to exclaim: we hail from McGill! And may others read the great fact in your superiority, so that they too will be constrained to confess that from McGill, and McGill only, could you hail!

This day, again, will ever appeal to our hearts because it marks a new era in our position. We now inaugurate the stately building wherein we are met. It has been built by the Governors of the University, out of the funds at their disposal, at a cost of $27,000. They have placed it exclusively as a free gift in the

hands of the Medical Faculty. Long will the memory of their liberality be green. Whenever we look round we read in every part of the substantial structure their good will towards us and the munificent scale by which our wants should be met. *Si videres monumentum, circumspice.* As part of the College buildings, it forms a handsome wing, being, where medicine should always be, conspicuous in the company of the learned. No more healthy, no more picturesque site could have been chosen. And the edifice, as one of the many splendid others that adorn the base of the mountain, combines for its purpose, as much as they do for theirs, the *ornate* with the *utiliter*. In proof of the last you will find in the internal arrangements that accommodation, convenience and comfort have all been carefully studied.

The building is 80 feet front by 84 feet 8 inches deep, and 48 feet high, to the top of the cornice, with a further elevation of 7 feet in the roof. The latter is a half mansard, broken up by three pediments, and covered with slate. The walls are solidly built, and are all of cut stone. The architects were Messrs. Hopkins & Wily.

On the east side, facing University street, is the students' entrance, leading into the basement. The lobby lands into a passage which, like the other halls, is 12 feet wide. On its left is a waiting-room, 30 feet by 32 feet 6 inches, furnished with chairs and tables. It is intended for resort during the intervals between lectures, where you may fill up your notes or otherwise profitably occupy yourselves. A strip is partitioned off and fitted to serve as a cloak room. On the right are the apartments of the caretaker, and on this floor are also spare rooms, closets, furnace and fuel cellar. The apartments having floors are based with concrete.

On the south side is the main entrance, facing Sherbrooke street. Having ascended the flight of stairs in front and crossed the lobby, you first meet two apartments, one on either side, which, when fitted up, cannot fail to command the admiration of every intelligent observer. One measures 30 feet by 34 feet; the other, 32 feet 6 inches by 30 feet. And your expectations concerning them will be the more raised when I add that our worthy Dean has personally contributed $1,000, under the stipulation that the sum shall be disbursed in furnishing them for a Library and Museum respectively. Behind these are the Chemical class-room, with the Professor's room; the former 30 feet by 46 feet, seated to hold 190 comfortably; and the Laboratory, 32 feet 6 inches by 32 feet, for the Practical Chemistry class. It is provided with furnace, balance room, and all other necessary requirements. This floor, "the ground floor," is also approached by a short stairs running up from below.

On "the first floor," or one above the last, is the General Class-room, on the right hand side of the landing. It is 33 feet wide by 43 feet 2 inches deep. It has 11 tiers of seats, arranged as in the other class-rooms, in trilateral shape, with desks and backs, regularly graded, and able to contain 208 persons. Into it two doors open, the uppermost one being exclusively for the convenience of students. Close by are two side rooms, one for the use of professors, the other for the Materia Medica Cabinet. On the opposite side is another class-room, the Anatomical, 32 feet 10 inches by 43 feet, and seated for 180. It is supplied with seven tiers of seats, and is well lighted with front and side windows and glazed sky-light. Behind is the Dissecting room, 56 feet 10 inches long, and 30 feet 2 inches broad, provided with sink, lift, as well as all other essential appointments, and having its floor covered with lead At its end are two small rooms, one for the Professor, and the other, which opens into it, for the Demonstrator.

The building will be warmed by hot water in circulation through coils and pipes of iron. Fittings are placed wherever gas may be needed. Means have been devised to ensure sufficient ventilation, and the acoustic adaptation of the Lecture rooms has also been regarded. In short, the whole is so designed that, when completed, the equal will not be found in any other medical school in the Dominion.

Medicine was a mere chaos till six hundred years before the Christian era, or a little earlier. Then the attempt was made to bring it into Cosmos, or under the comprehension of philosophy. The Asclepiades were the true originators of the science, and in helping on the work Pythagoras was famous.

Eight hundred years more passed by, however, before medicine was so digested, or so trimmed, as to be able to be publicly taught in a systematic manner. Then the Philosophical school or sect, which had in the meanwhile flourished, was superseded by the Empirical, under the guidance of Serapion and others; and then, the third century having dawned, there sprung up the first institution for medical education. It was founded at Iondisabour. It brought up many eminent men, among others, some centuries after, was Rhazes, the Prince of Physicians; but its teachings were soon opposed by those of the Methodics, and afterwards by the Dogmatics and others; for of it, as of others, it is true, "*nec scire fas est omnia.*"

The attendance upon some of the ancient colleges far exceeded that upon any single one in modern times; perhaps from there being not so many then as now to divide the palm. That of Bagdat, with which was associated an infirmary and labo-

ratories, numbered as many as 6,000 students at one session, in the latter part of the eighth century.

In the eleventh century one of the most celebrated was the University of Salerno. Its medical lectures were very numerously attended during the Crusades, the place being then a fashionable resort. It awarded its degrees to students of seven years standing.

I shall not steep you in the Cimmerian gloom which rested upon later endeavours to diffuse professional learning, as it rested upon whatever else was calculated to ennoble mankind, till the middle of the fifteenth century; nor, pleasant though the task might be, trace the subsequent establishment throughout Europe, in the sunshine that succeeded, of medical schools which still continue to win the admiration of the whole world; but I propose to engage in what, I trust, will be to you still more agreeable. I propose to turn your attention from foreign seats of learning and bygone days to our own: for, as of the patriot and his country, so of the Alumnus and his college it may be sung,

> "Such is the" *Alumnus*' "boast where'er we roam;
> His first, best" college "ever is at home."

Before 1824 a few occasional lectures had been given in Montreal, but without the order, or regularity, or union that was afterwards manifested. In that year four of the most competent practitioners resident here, viz., Drs. Caldwell, Robertson, Stephenson, and Holmes, associated themselves to deliver, annually, courses of lectures upon certain branches of medicine. The school, thus initiated, was conducted with signal ability from the first. Many were its struggles, but the wisdom and energy of its brave founders triumphed over all. It was named the Montreal Medical Institute. Its pupils had the advantage of walking the General Hospital, which had been opened two years previously. Its powers were limited, however, to those of extra-academical bodies. This institution is of a peculiar interest to us. It was the child to the man of which the present one is father. Four years ended its nonage. Then it was grafted as a flourishing scion into the University of McGill College, of which it afterwards constituted the Medical department. It now had the privilege of procuring, for successful competitors, the *summos honores*, in the form of the degree of M.D. Its first graduate was William Logie, in 1833; he was the harbinger bud of the wreaths of flowers that blossomed in succeeding springs. Its usefulness was greatly promoted by the formation of a Library and Museum, which its Faculty made more extensive year by year. It began with four chairs, viz., Practice of Medicine, Midwifery, Chemistry and Materia Medica,

Anatomy and Surgery. With the exception of a suspension during the rebellion which broke out in 1837, the lectures were delivered unremittingly every year. The last two chairs named were subsequently divided, so that Chemistry, Anatomy, and Materia Medica were taught separately. Surgery, however, was only released from its old bond to be joined to a new one—Midwifery. In 1842 the union was severed and each consigned to its own guardian. In November of the following year the efficiency of the school was materially increased by the opening up of the University Lying-in Hospital, which afforded students the opportunity of attending cases of labor. Two years afterwards four branches were added to the previous ones taught. They were: Institutes of Medicine, Medical Jurisprudence, Botany, and Clinical Medicine with Surgery. In the next session Clinical Medicine and Clinical Surgery were so distributed as to be tanght by separate lecturers. Since then the only addition to the Curriculum has been in Practical Chemistry, which has now been taught for two years.

From the origin of this Faculty to this the fortieth year of its existence, it has enlisted twenty-six lecturers or professors, including its founders. Upon fourteen of these honoured men time has executed his commission :

> " He undermines the stately tower,
> Uproots the tree, and snaps the flower;
> And sweeps from our distracted breast
> The friends we loved—the friends that blest."

The last we have had to mourn the loss of has been Dr. Fraser, and because the last, I feel that no apology from me is needed while paying a short tribute to his memory, that it may be the more surely preserved among us.

William Fraser was born in Perth, Scotland, I believe, in the year 1814. After having completed his general education he entered upon the study of medicine, which he pursued, chiefly, in Glasgow, attending lectures both at the University of Glasgow and also at the Andersonian University. He was remarkable for the ardour, industry and perseverance he displayed in attaining to a knowledge of his profession. His tenacity of application and constancy in learning were such as if he had "set his life upon a cast," and was resolved that by no fault or shortcoming of his should there be any "hazard of the die."

Upon the outbreak of cholera at Roseleith in 1832 he was sent down to the parish by the late Dr. Lawrie, his Professor of Surgery, to officiate in a temporary infirmary opened for cases of the

epidemic then raging. I mention this incident because it shows the high opinion entertained of him at that early time, judging him worthy to be trusted with a post of responsibility, And I mention it for another reason. Roseleith is the native place of our Dean, and there he made his acquaintance. As they then grasped their right hands of fellowship for the first time, neither one nor other had a glimpse of the brilliant future that awaited them in a far-off land, across a thousand miles wide bridge of sea, where they were to be colleagues for more than a quarter of a century, to supply the wants of the Dominion and parts which far outly her borders with troop upon troop of skilful and accomplished practitioners.

In 1834 young Fraser received the license of the Faculty of Physicians and Surgeons, Glasgow, which is a double qualification, the same as the Medical degree of our University. It entitles the holder to the position, with all the privileges of a general practitioner in that city, so that with it he can there practice Physic, Surgery and Midwifery. Fraser, however, used it more as an honour thon a power. Having heard of Canada, where "worth by poverty depressed" rises not so slow as in the mother country, he left home and came out here. Soon after his arrival in this city he was made Apothecary or House Surgeon of the General Hospital, or rather both, for in those days the offices were fused together and held by one person.

While gathering experience of disease in its protean forms in this new situation, he decided upon extending his theoretical acquirements by re-attendance upon lectures. With this view he matriculated in this University, followed the courses, and, having qualified, graduated in 1836.

The graduation class of that year contained another member of high distinction—I mean Dr. William Sutherland, our Emeritus Professor of Chemistry. Dr. Fraser seemed to be so drawn towards him that an intimacy sprang up which time served to brighten, the tendrils of his heart being ever ready to cluster round the charms of a social, manly, philosophic nature. And whenever memory recounts the pleasures of a by-gone oratory that fell in brilliant gleams upon admiring pupils, or a physician to whom the hearts of his sick were gratefully knit in warm affection, or a friend who tenderly felt for another's smart and could cheer the lonesome way with his winsome words, then will it recount some of the graces of a Sutherland!

Having obtained license to practice in Lower Canada—which can be got by proving ownership to one's degree—Dr. Fraser gave up the hospital and engaged in private practice. He realized the fond

dreams of hope, and from a slender perch climbed up to an uppermost branch to rejoice in all the pleasures which first-class success could yield. Ever ready to heed the call of the sick, to act upon the rule, "*labor omnia vincit,*" and to do the best for his patients, he took, at the flood, the tide in his affairs which led on to fortune, and after thirty-six years toil he was worth £40,000 or £50,000.

In 1845 he was chosen to fill the chair of medical jurisprudence. I had the benefit of his maiden course, together with your able Professor of Medicine and four others whom I can recall. It was new and not obligatory retrospectively, and for these reasons the attendance was so thin. Here he gave the first marks of aptness for lecturing that after years only rendered more prominent. I well remember the zeal with which he threw himself into his work, the pains-taking he exhibited in its discharge, and the faithfulness with which he carried it through to a satisfactory close. His aim was to afford his class a clear, curt, well-digested view of his subject, abreast with the progress of the day.

In 1847 he was elected by the Board of Governors one of the medical staff of the hospital. Though that year was a very busy one for doctors, owing to the spread of an extensive epidemic of Typhus or Ship Fever, imported by emigrants who had suffered from famine consequent upon the failure of the potato crop in Ireland, Dr. Fraser shewed himself equal to the emergency. In other outbreaks, as those of cholera in 1849 and afterwards, he was always under arms and effective in the path of duty. His patients had great confidence in his wisdom, and his humane treatment won their esteem. He was fond of Surgery, and as an operator was daring, bold and resolute. He was also fond of trying new remedies in order to determine their real merit, or ascertain some new point in their action.

In 1849, yielding to the wish of the Faculty, he was translated to the lectureship of Institutes of Medicine, which he filled during the twenty-three years following. He here displayed the characters that were so marked in his former post, but more developed by the training he had there received. Thousands of students have borne away his teachings, and with their deep science have drank in the spirit of inquiry they caught from him, and profited by the example of diligence he set before them.

Dr. Fraser had a lofty idea of the dignity of medicine. He was a stern foe to empiricism under every guise, and a strong upholder of rational medicine. To his mind its pillars were Physiology and Pathology; or they were the streams through which the fountain was to be supplied. Partiality, however, did not close his eyes to

the inestimable value of Clinical study. He was a useful member of the several Medico-Chirurgical Societies that rose and sank during his career; and he occasionally contributed original articles to the local journals. The first was in the *Montreal Medical Gazette* for May, 1844, about a case of Ovarian Tumor. In the same journal will be found his account of a case of Castration, and one of Spasmadic Croup. In the *British American Journal* he published two papers, one on Erysipelas treated by Venesection, and another entitled, "Observations on Fever prevalent among Emigrants." In the *Medical Chronicle* he wrote upon "Galvanism in Paralysis of the Bladder," "Amputation of the Forearm," "Strychnine in Cholera," and "Perineal Section in Stricture of the Urethra." In this journal and in those that succeeded it, several hospital cases are reported under his name, treated by him, but written by others who had watched them.

For several years Dr. Fraser was a Governor of the College of Physicians and Surgeons, Canada East: and a Member of the Natural History Society of this city.

And here the sable line must end this rude sketch. His long life of activity, having been embittered by Prostatic Hypertrophy for some time, at length urinary infiltration set in, and in a few days more, on the 24th of last July, he was removed from among us

> "To that mysterious realm where each shall take
> His chamber in the silent halls of death."
> "Until the daybreak and the shadows flee away."

We deeply deplore the breach made in our ranks. We have done our best towards its repair. The admirable way in which your new Professor of Institutes managed his former offices flatters us with the florid hope that you will soon realize his appointment to have been the best that could have been made. The blank he has left, in turn, Dr. Ross, a gold-medalist, fills. He brings with him the Clinical experience he gained during the years he was in the hospital, where he won for himself garlands of praises.

A feature of this school is, she does not forget her students, nor pass them over for strangers. Her chairs are her highest prizes, and when her own can fill them she glories with maternal pride in drawing them still closer to her bosom. Of her eleven Professors eight have been her offspring, and these eight have sat at the feet of one whom they still thank for his invaluable lessons. That one is the acknowledged Nestor of Canadian Medicine, beyond whose professional opinion there is no appeal. But to them he is far more; he is as a fond father whom they dearly love, a sincere and

faithful friend in whom they delight; and while he is these, that one is also the one whom they esteem as their Dean!

As motion causes heat, heat light and chemical action, chemical force electricity and magnetism, so in the progress of this school several other schools have started up; or, rather, I should say, as life-force, by acting on matter, brings out these cosmical forces, so our existence has been followed by the birth of others. That is what I should have said, for life-force has its origin from no other force, nor into it can no other be turned, nor can it be merged into any other. And that is just the case with this school. It owes its start to no other in the Dominion; no other can take its place; and it has lost nothing by developments, on the contrary, "*crescit crescendo.*"

The relation of medical schools to universities in this country is unlike what it is in the great model institutions of the British Isles. There, there are few universities and many schools. Here, every school is part of a separate university. I do not object to many schools. I would always rejoice to find many were needed, and would gladly welcome the efficient. But I hold, and very strongly too, that nothing is more calculated to make them engines of destruction than to constitute each one a faculty of a distinct university. Legislation could not inflict upon a people a greater evil than to multiply bodies having unlimited power to grant degrees to whom they please, and as they please, without hindrance or supervision, where, as in Canada East, such degrees procure for their holders a license to practice, without further examination, however great may be the measure of their incompetence. Through its university each medical school has this unlimited power, and, having it, there is to be apprehended the liability that the maintenance it could not expect because of its sterling worth or established reputation, it will seek to acquire through the lavish exercise of the power unwisely placed in its hands. Especially is this to be expected when competition springs up late in the day. And while it lasts, such a school may show its disregard or sacrifice of the health, or happiness, or life of the public, by periodical drains of incompetent physicians whom it sends out to deal with these essentials upon which the security and prosperity of a country necessarily depend.

What you want in a respectable medical school is: firstly, that it shall have abundant opportunities for imparting a practical acquaintance with diseases and injuries through actual observation and clinical teaching. For this an hospital is indispensable. In the mother land it is the hospital originates the school. The school is the school of the hospital, and from it gets its worth.

There no eminent men would presume to teach medicine who were destitute of the resources of an hospital.

What, again, you want in a useful medical school is an extensive library, where the periodical literature of different places may be referred to; where the classics of the profession may be consulted; where there are some thousands of volumes of standard books; and where the works last issued are annually added.

What you want, further, in a reliable school is that it should be thoroughly equipped in means of illustration. It ought to have a museum largely stocked with both Anatomical and Pathological preparations. The latter to be so varied as to comprise, with the more common, the rarer lesions; in short, such a display as can only be accumulated gradually, after tens of years of collection. And in addition to these there should be as many series of the best executed plates or drawings, as well as such varied objects, or models, or instruments as are generally serviceable.

As you pursue your studies you will find them very entertaining. You will find our abode is on a crust twenty-three miles thick, the cooled scum of molten blazing rock beneath, one hundred and sixty times hotter than red-hot iron; and our life is a vortex of changes, kept up by tearing from milk, or flesh, or fruits the atoms of our anatomy to make good the piece-meal wear of what we once called ourselves. You will find that we are kept warm by our unlocking the sunshine from the cellars of food or fuel in which it has been stored after it has ridden upon its beam through space that would take a railway train two hundred and thirty years to cross; and that we are ever in motion, travelling with the earth, with a speed sixty-eight times as great as that of a bullet fired from a rifle.

Your studies will also fill you with interest, as they show you how wonderfully you are made: as they lead you, stage by stage, through the work of building the human frame, from the time of the fertilized ovum cradled in the Graffian vesicle onwards: as they point out the outlay of myriads of nerves, of vessels—blue, red, white and colorless—meandering in leashes over mountain-like organs, valley-like dips, and plain-like surfaces; as they trace the finger of design: as they give every measure even down to the 1-400th part of a line; and as they tell of every function.

Medicine, however, chiefly commends itself because of its utility. It points out the laws of health; how to stamp out the decimating plague, to cause the air or water of a town to be pure, and to promote the salubrity of its people. It takes you on the wings of contagion to its strong holds; shields from its venom; tracks it in its progress; and fits you to enter the lists against it sure of victory. It gives you power over the ills to which flesh is

heir. It takes you where Flora spreads her treasure, and down the mines of the earth, and into the noisy shop of the factor, and many a place besides, to cull remedies. It learns you what they can do, when to use them, and how to give them. It speaks of the insane root that takes the reason prisoner; of Kecksy or Conium that killed Socrates; of the finger of Hermes, which is the anima articulorum; of the Masch Allah, or "gift of God," that first provokes pleasure, then lulls to rest; of one that in fractional parts arches back the body into the rigid locks of death; of another that relaxes every part; and of very many more. It arms you with the surgeon's skill and strength when the question is what has been the injury, when the cry for relief is importunate, and when if the right aid be not afforded the case must be lost. It enables you to staunch life's current in its wasteful flow; to rid the air-pipe of the struggler for breath from its foreign body; and in countless other ways to prove the friend of distressed humanity.

Marvel not that such a science, such an art should be richly strewed with encomiums. Let me read you two or three. One of the oldest says: "Honour a physician with the honour due unto him." "The skill of the physician shall lift up his head, and in the sight of great men he shall be in admiration. Give place to the physician. Let him not go from thee for thou hast need of him." Among the Romans, Cicero was exuberant in his praises of the profession. According to him, "nothing brings man nearer to the gods than in giving health to his fellow-creatures." And in more modern times Dr. Johnson, the leviathan of English literature, thus beautifully records the memory of a practitioner:

"When fainting nature call'd for aid,
And hovering death prepared the blow,
His vigorous memory display'd
The power of art without the show.
In misery's darkest cavern known,
His useful care was ever nigh,
Where hopeless anguish pour'd his groan,
And lonely want retired to die."

These are a few of the inducements that prevail to urge you to attain the object before you. The path is made easy in proportion to the thoroughness of your previous education. Where that has been liberal it is the best preparative to future study. The higher the preliminary training the more easily will you acquire your professional learning, and the more surely will it be remembered. When possible, a collegiate course in Arts should be added to the instruction of the Grammar or High School. The benefit conferred is not merely the grasp of a larger field of information, but, also,

the better culture of the mental faculties, whereby knowledge will be more efficiently apprehended, retained, and turned to profit. The tentacula by which it is secured will become more expanded, effective, and polished. Graduates in Arts should, therefore, be able to acquire the profession sooner than others, and upon the belief that such is the case they are granted the benefit of one year off from the four which in other cases must be spent in the study of medicine. And while urging the advantages of the highest preliminary education, permit me to point to the superior opportunities this university affords to those in search of such a gain, and also permit me to add that they are opportunities for which, in a great measure, the Dominion is indebted to our learned Principal, whose successful labours in elevating education among us, and promoting its diffusion in its varied departments, have won for him the gratitude of all by whom they can be appreciated.

Once entered upon the study of medicine act out the note of Lucretius, "a falling drop at last will cave a stone." Avoid the mistake of attempting too much. The celerity that makes the ocean cable or circular saw valuable will kill the student. Impatience is one of the giants he has to war with. The last lecture, the capping day, the start in life, the first fee, all seem so far off that the desire is to draw them nearer, to shorten time, and pile on studies. A forcing system is apt to be instituted. The most jejune compendiums, the most condensed notes are most pondered. Such a plan may help to pass an examination, but it will fail in after life. What is got by it will be like snow,—quickly gathered and quickly melted away. In winter you may not have time for much more, but in summer you have, and then your reading should extend to the best modern authors on important subjects, and your time be largely spent in the hospitals. Your memory is to be the infirmary from the resources of which your patients are to be treated *secundum artem*, and therefore you cannot too richly store its cells. Depend upon it, a year or so more, when this is the object, will not eventually be regretted. In my time it was not unusual to study five years, and when I look across the almost quarter of a century that has lapsed since my five ended I have no regret because they were so many.

Again,

> "Like an inverted cone
> Wants the proper base to stand upon,"

do not invert the order of your studies. Another error to be shunned is to study the final branches before the primary. It is the loss of method, and that is a cause of imperfection. Even

haste is here no excuse. Though these be the days of electric speed and steam force; yet, in their haste there is method. The telegraph message and river propeller run their course in order. So, whatever be the haste to get through medicine, the student should go, like them, right, straight through his course, in the proper way, without either slip or skip. Get such an acquaintance with the rudiments that they shall be the firm scaffolding or frame of the edifice you are to surround and fill in with all that will complete its structure. Undoubtedly you will have knotty things to master, but be not faint-hearted. What others have accomplished you can achieve. They were just as raw and verdant at the start. But they won the victory in time, by constant application, diligence during lectures, and persevering study. Therefore, "*ni desperandum.*" The same means will as surely carry you through. If "*perge et prospera*" be your watchword you will cross the Alpine ridges of ignorance with a splendid array of forces, and be so able to marshal your army of medical lore as to meet any move on the chess board of disease and accident. Do not drop what is hard but study it the harder. And though but two courses be exacted, fail not to add a third on the branch you feel to be to you as the heel to Achilles.

At your lectures, be punctual, be regular, be constant, be exemplary. It is a bad prognostic to see a young fellow who has paid out his father's money, got, usually, after much toil on the old man's part, instead of reaping the advantages it procures for him, lounging the time about the college premises or sauntering through the streets. I know of no student who was attentive at his lectures, with a fair share of intelligence, that was ever plucked. A chronic system of neglect, however, will inevitably ruin any one. Be diligent in every useful way. At your lectures carry off all the information you can. From the wordy flood poured forth make rivulets on paper from which the brain may drink in afterwards; otherwise the whole will slide over both ears unheeded and uncaught. Often try to recall what you have learned, digest it, sink it deep into your mind, and from time to time hold an assize with yourself as to your proficiency, by constituting yourself both the examiner and the examined.

It is often said of a physician, his popularity is due to his manners. While, then, you are preparing for his position, attend also to their culture. As you would have them by and bye, so you should trim them now. Let the shadow that falls from you upon others be gentle, kind, and genial. Let it not be coarse nor repulsive, for the sick you will have to attend may be of delicate feeling, cultivated taste, and refined minds. Let it leave no remembrance

of vulgarity to wound the tenderest nature. Let it always be humane and sympathizing. Let it not exhibit any kindred with a spirit of vandalism that delights in wanton wrong. Let it not mar its influence by any occasional burst of rowdyism or wild puerile folly. And while the shadow that falls from you has these traits, let it also have a quiet, grave cast. Your manners should cast such a shadow, for the business of the physician is no sport, impending death is no joke, the responsibility of having a man's life in your hands is no farce, the guilt of not having done all you should have done is no trifle.

As nothing is harder to escape than the snares of bad habits, once their coils have been spun, so medical students should not form habits unsuited to practitioners.

In no other profession than the medical is there greater need for a man to be sober. Unless the upper decks be kept clear for action his wits are not fit to meet an engagement. If I could gain the ear of an inebriate who prefers intemperance to reason I would tell him to aim to be almost anything but a drunken doctor; I would tell him that as such sooner or later he will inflict injury, and reduce himself to penury. Who more unfit than him, when muddled or half mad, to rule where every hope lingers upon his words; where bleeding hearts look to him to save a dying mother; where his groggy fingers try to impart news to his maudlin brain or to shake out its behests? Who that could avoid him would have him?

Now for a few words on smoking. I do not say "thou shalt not smoke tobacco," after the authorities of Berne, who caused these words to be written on a tablet of their church; nor will I uphold to your imitation the pattern of Dr. Parr, who, unless asleep or eating, was usually found burning the weed; but I advise those of you who will smoke to do so at the right time and in the right place, and so that it will not enfeeble your energy nor fog your mind. Dissection would be finer if, while being done, the hand were not weakened by the narcotic. The atmosphere of the class-room would be more pure and bracing, more conducive to attention and memory, if it were not soiled with deadening nicotine.

Set a proper estimate on the worth of life. No study can be too great which will enable you to save life or make it more enjoyable. These are the objects of medicine; these are the merits you must affirm you have before you can be enlisted into her ranks. Before you can be graduated you will have to swear "*coram Deo*" that you possess "*omnia ad ægrotorum corporum salutem conducentia,*" in other words, that you are masters of the skill and art which con-

duce to the recovery of the sick. What a motive is this to urge upon you to turn your advantages to the best account; to give the full benefit of all the resources science places within your reach to your patient, who looks to you, under the Great Physician, to prolong his days and avert the calamity his death would cause. Be no respecter of patients. Treat all alike. Destitution may mask the noblest front. Some physicians were once consulting over a loathsome looking object on the pallet of an hospital, and when their prescription was given, it was added in Latin, "let the experiment be made upon the vile body." Instantly the mass of woe started from disguise, and in the same tongue remonstrated, "let not that body be called vile for which Christ died."

Think highly of your profession; think of it as honourable and noble, as useful and God-like. Its fields are ripe with opportunities to grace a life of true religion. There are rare chances for being unspotted when gold would tempt to purloin or to pay unnecessary visits, or to needlessly officiate, or to speak falsely. There where there is "a constant interruption of pleasure" self-denial can shine out in full splendor. There may be kindled the flame which will cause your breasts to burn with fellow-feeling, tender pity, and kind compassion. There may be sown broadcast the seeds that will richly store your garners with the praises of benevolence, humanity, and philanthropy. And there can be conferred such acts of charity as may well challenge others to excel them in being more disinterested and less ostentatious.

Be heroes in the strife. Your reputation is not to be won at the cannon's mouth, nor your breast adorned with valor's clasp; but a heroism my glisten in your eye the world's brave heroes never knew. When pestilence causes the eagle eye of the soldier of the forlorn hope to quail, or his lion heart to fail, then, like one of old, you may stand between the living and the dead. Your spirit is not to be fired by the carnage of a nation, nor the wails of the bereaved, nor the triumphs of might over the weak, nor the panegyrics of the press; but, by prospects of recovered health, and happiness, and prosperity, by promptings of conservatism, and by kind concern at human pain.

Let your life be as a sun of wisdom shining out upon the world to which your influence extends; let it be unsullied by a cloud of suspicion against your worth or sincerity; and when the crimson of the sunset sky paints the evening, when you shall no more go forth to work, then, in the night that follows, the bright stars that have treasured up the light of the past will shine forth to welcome you home to "the mountain of myrrh and to the hill of frankincense."

A Case of Fibro Cystic Bronchocele. Removal of the Right Half of the Thyroid Body. By GEORGE E. FENWICK, M.D., Professor of Clinical Surgery, McGill University.

(Read before the Medico-Chirurgical Society of Montreal, October 19, 1872.)

Mr. PRESIDENT AND GENTLEMEN,—It has recently been observed that during the last fifty years little or no advance has been made in the treatment of Bronchocele, and when we examine the records of surgery, as well as standard works on that subject, the enquirer cannot but feel disappointment at the small amount of information to be obtained concerning Goitre. It is possible that disease of the thyroid body being, as a general rule, chronic, extending in many cases over years, give rise to slight suffering or deformity, that it has failed to attract that amount of interest amongst surgeons which its importance frequently demands. We may remark that if little has been done towards the treatment of Bronchocele, that considerably less has been done to bring prominently before the profession the various conditions of the thyroid body observed in disease, or to definitely classify those conditions.

If we except a paper published in the London *Lancet*, which was read before the Hunterian Society, last January, by Mr. Morell Mackenzie, the accounts met with in standard surgical works, on the subject of Bronchocele are very meagre.

Sir William Fergusson, in the last edition of his work on Practical Surgery, published two years ago, makes a few general remarks on tumours of the neck, which, he states, are commonly connected with the thyroid gland, so well known under the term Bronchocele, Goitre, Derbyshire Neck, &c., &c.; but there is no attempt at classification. Mr. Erichsen, in the last edition of his excellent treatise on the Science and Art of Surgery, describes four distinct forms of enlargment of the thyroid body : Simple Hypertrophy, Cystic Bronchocele, which may be either single or multiple, Pulsating Bronchocele, and an acute form, in which latter the thyroid body becomes rapidly enlarged, and which, from the non-expansion of the fascia of the neck, presses injuriously on the subjacent parts, thereby threatening death from asphyxia. In Vol. V., Second Edition, Holmes' Surgery, will be found a very elaborate article from the pen of Mr. Holmes Coote, but there is no definite classification.

Mr. Morell Mackenzie divides the subject into seven distinct varieties, which, however, he states are to be regarded as different stages of development of the same disease, "sometimes progressive, sometimes retrogade." He excludes Exophthalmic Goitre, as being a disease of an entirely different nature, and one in which

the goitre forms an unimportant part of a neurosis. The varieties mentioned by Mr. MacKenzie, and which have all come under his observation, are as follows: First, Simple or Adenoid; second, Fibrous; third, Cystic; fourth, Fibro-Cystic; Fifth, Fibro-Nodular; Sixth, Colloid; Seventh, Vascular. This division of the subject is based on the observation of two hundred and eleven cases which have come under the care of Mr. Mackenzie during the past four years. Without in any way calling into question the accuracy of this division, it appears to me that there is here an unnecessary refinement of this subject, which, for practical purposes, is to be regretted, as it is apt to lead the observer into error.

I will not more than allude to the causes of Bronchocele, as the evidence on this head is far from being definite. The causes commonly assigned, as the continuous use of snow water, or of water impregnated with calcareous or earthy matter, is by no means satisfactory. This theory has arisen from the frequency of the occurrence of this disease under such peculiar conditions. Cretinism and Goitre very frequently exist together. They have been observed to prevail in deep valleys, where the sun shines only during a part of the natural day. The condition of the air is unhealthy from stagnation, and the soil is damp and unproductive, added to which, the population are poor, and are further deteriorated by frequent intermarriage. Under such conditions we can alone expect to see humanity in its worst form; nor need the observer feel surprised at meeting a race physically and mentally degenerate. It is a matter of observation that cases of goitre and idiocy in the young have greatly improved in body and mind by removal to a more healthy locality.

In the simple variety of Bronchocele there is an increase of the normal gland structure: it, however, has a tendency to undergo change, more especially if the disease is left to itself. This change, according to Mackenzie, consists in the deposition of fibrous tissue. This fibrous growth may be partial or general, and in some instances cysts are developed. The contents of these cysts are generally clear, limpid serum: in other instances the fluid is dark and grumous, loaded with cholesterine, fat globules, and blood corpuscles. Speaking from the experience I have had, which is limited, in all the cases that I have tapped, the fluid was of the character of a specimen which was removed from a Cystic Brochoncele in the case of a man who was under treatment at our hospital, and in which my colleague, Dr. D. C. MacCallum, removed some ℥xvi. of fluid.

With regard to treatment in simple Goitre, iodine appears

to be a specific in the endemic variety. In sporadic cases it is frequently unavailing. In weak anæmic subjects, iron, in some form, should be given, and proper hygienic means resorted to. Counter irritation is highly spoken of, and in some cases beneficial; but in some exceptional instances it has appeared to aggravate the malady. Tr. Iodine, both simple and compound, and the Iodide of Lead have been used with benefit. In India a common practice, and one said to be never-failing, is the applicatian of the Bin-Iodide of mercury ointment, exposing the part, after its application to the direct rays of the sun. Electrolysis has also proved of service. In the other varieties of this disease Iodine appears to exert no influence when externally applied, nor is it of any benefit when given internally. Various methods have been tried for the relief of the malady in this form: incisions into the structure of the tumour, the use of the seton, tapping cysts when they exist, and injecting them with Iodine, Perchloride of Iron, or any other irritant.

Mr. Mackenzie states, in regard to Fibrous Bronchocele, that it varies in size from that of a fist to that of a child's head; it is firm, dense, smooth, unyielding, and is apt to change its condition, becoming fibro-cystic, though the tumour remains stationary for years, but may at any time, and from no apparent cause, assume an active disposition. It attacks either lobe, the isthmus, or the whole gland simultaneously. As a rule, it does not create much disturbance of the general health, except from pressure on the trachea; and in one form of this variety, called Suffocative Goitre, the lateral lobes of the thyroid body appear to grasp the trachea so that the calibre of that canal has been found, after death, very considerably diminished; enlargment of the lateral lobes has also, in some instances, so pressed upon the trachea and œsophagus as to interfere, not only with the act of breathing, but with that of swallowing; and one case is mentioned in which the jugular vein was so pressed upon as to occasion distressing congestion of the head.

These facts all point to the necessity of early interference in such cases; not to allow the disease to assume such a size, and to form such extensive connections as that treatment can only be of a palliative nature. Hitherto setons have formed the principal means used by the surgeon; their insertion is not unattended with danger. Cases are mentioned where death has occurred from hæmorrhage, and in one instance reported, the patient died during the operation of passing the seton, from air getting into a large vein which had been opened.

The question of removal with the knife of the entire mass, or a

large portion of the mass, has engaged the attention of surgeons, and I think that if the subject is fully and carefully considered, this operation will not be decried as inadmissable in modern surgery. It is as well to consider that the thyroid gland is a vascular body without ducts, situated in the vicinity of the great vessels and nerves in the front of the neck, being itself supplied by four and sometimes five arteries of considerable size and free anastomosis, and having in front of it a plexus of veins terminating in three large vessels which open into the internal jugular, and vena innominata. This hurried description of the anatomy of this body will convey some idea of the difficulties to be encountered in an attempt at removal; but although the risk to the life of the patient is so great when the disease has assumed large proportions, yet I am of opinion that it would be greatly lessened were surgeons to decide on early removal. Bear in mind that it is not in every case of enlarged thyroid that I would counsel early removal, but in those fibroid masses which are unaffected by sorbifacients, whose tendency is to steadily increase and sometimes take on that acute form of rapid enlargment, whereby the patient's life is jeopardised. Again, in cystic disease of the thyroid I do not think there is advantage in removal of the mass, because other methods of treatment are open which are equally efficacious and far less hazardous.

Mr. Mackenzie recommends tapping the cyst and injecting it with the Perchloride of Iron, and his results are very encouraging; but although in true cystic goitre the success of his treatment has been unparalled, yet in cases of large fibroid masses he has failed, except partially. in giving relief.

These remarks are introductory to a case which came under my notice during the past summer, and in which I removed the greater part of the thyroid body. I am indebted to the Clinical clerk, Mr. Hockridge, for the notes of the case, which are as follows:

Marie M., aged 21 years, a French Canadian, was admitted into the Montreal General Hospital on the 23d May, 1872, with an enormouse fibro-cystic tumour of the thyroid body. She is a robust, healthy looking young woman, and is the second child of a family of twelve. The tumour commenced to grow when she was three years of age, and attained its present size when she was about seventeen, since which time she says it has appeared to remain stationary. It consists of three lobes, a huge central mass, and two lateral, measuring 17½ inches in circumference. There is considerable pulsation of the arteries, evidently communicated by the carotids, and the veins look large and tortuous. The lobes

feel perfectly distinct, are very heavy, weighing, apparently, several pounds, and the whole mass is raised in the act of swallowing. When seen by Dr. Fenwick he stated that the removal of the tumour by operation might be accomplished, but at great risk of the life of the patient. On the 29th May the central mass was tapped with a small trochar, and about ℥ij of bloody serum was drawn off. The cyst was then injected with ℥iv of Tinct. Iodine, two other punctures were made at points which felt like cysts, and but a small quantity of fluid of the same character removed, and about ℥i of Iodine injected into each. In a few days the patient had recovered from the effects of an attack of iodism, consequent on the injection, and she left the hospital. As, however, the patient suffered from increased difficulty in breathing, she returned to the hospital on the 7th June, and a consultation of the hospital staff was summoned for the following day. The patient declared her determination of submitting to the operation, as she said that her life, under existing circumstances, was a burthen to her. The patient was removed to the operating theatre and placed under the influence of chloroform, and Dr. Fenwick, assisted by Drs. Fraser, Howard, Reddy, and the House Surgeon, Dr. Roddick, proceeded to the removal of the mass.

The method adopted in the performance of the operation was that recommended by Professor Green, of Portland. The incision was made in the median line, extending the whole length of the tumour to the upper part of the strenum, getting down at once to the tumour, and dividing what Green terms its "fascia propria." There was no difficulty then in enucleating the mass; it was rapidly turned out with the finger, the dissection being carried outwards. In getting to the posterior edge the veins appeared large in size, being spread out and at the same time incorporated in the mass of the tumour. It was at this point that the difficulty arose, in continuing the dissection with the finger backwards, the veins seemed to tear like paper, and the effusion of blood was sudden and enormous in quantity. This, however, was controlled after some difficulty, and ligatures applied. The superior and inferior thyroid arteries which appeared small were ligated; the mass was found to extend in the interspace between the trachea and œsophagus, and the latter was exposed for about three inches of its extent. Coming to the pedicle, which appeared adherent to the side of the trachea, and which was about the size of two fingers, it was decided to cast a ligature around it and remove with the knife the tumour. This being done no further hæmorrhage occurred. The edges of the wound were brought together by eight interrupted sutures and the patient removed to bed. The tumour was nodulated,

composed of three distinct masses, the central one of which, when cut into, consisted of a cyst which held about six ounces of fluid. Before opening the cyst the tumour was found to weigh 2 lbs. 14 oz., and consisted almost entirely of hypertrophied gland structure intermixed with fibroid tissue. An hour after the operation, the report states, the pulse was 90, regular, but weak. The girl complained of great thirst; brandy and water with beef essence had been ordered, but was rejected, there being considerable irritability of the stomach. Iced champagne was substituted for the brandy.

Six o'clock in the evening the patient still very weak. The pulse had risen to 120, was weak and flickering. An enema of beef tea, ℥ij, with brandy, ℥ss, was ordered to be repeated every half hour. The champagne was retained, and was agreeing well with the patient. Towards midnight the pulse rose to about 150, as did likewise the temperature of the body, which went up to 106 °. As she seemed restless and uncomfortable, with no inclination to sleep, half a drachm of Tr. Opii was given in camphor water. This had the desired effect of allaying the restlessness which existed, and she slept between the intervals of administering the nourishment and stimulants. The tendency to vomit was also arrested, so that on the following morning she had very much rallied from that alarming state of prostration which had followed the operation. From this time she made a rapid recovery. Considerable suppuration followed, the wound filling up and closing by granulation. The ligatures separated and came away; three on the 20th June, the twelfth day, three more on the day following, and the last ligature separated on the 14th July, being the thirty-sixth day after the operation. Slight secondary hæmorrhage followed the separation of the ligatures, but was easily controlled. The wound had entirely closed by the 29th July, on which day the patient left the hospital.

With regard to the operation itself I feel convinced of its feasibility, but would remark that if called upon to perform a similar operation I should proceed somewhat differently, as I think it would be better to separate the mass first from its central attachment, dissecting beneath the tumour from the median line, by which means the operator would arrive at the origin of its vascular supply and thus avoid much of the effusion of blood which, to a certain extent, is unavoidable.

I cannot do better than conclude this paper with a note of warning given by Professor W. Warren Green, of Portland, Maine, to be found in the January (1871) number of the *American Journal of Medical Science:* "If it is beyond all question determined, in any

" given case, that such an operation gives the only chance for " snatching a fellow-being from an untimely grave, be it remem- " bered that an accurate anatomical knowledge, and a perfect self- " control under the most trying ordeal through which a surgeon " can pass, are indispensable to its best performance.

To the Editor of the CANADA MEDICAL AND SURGICAL JOURNAL.

DEAR SIR,

During a recent holiday trip to the other side of the Atlantic, I took the opportunity of visiting a few of the larger hospitals of London and the renowned Edinburgh Infirmary, taking a few imperfect notes of what I witnessed in the treatment of disease, which, with your permission, I beg to submit to the readers of your valuable journal, with the hope that they may not be uninteresting to them, but especially to those who have never travelled even so far.

Soon after my arrival in Edinburgh I found my way to the Infirmary, where I was cordially received by Mr. Meredith, Dr. Watson's House Surgeon, who pointed out to me all the cases of interest, medical and surgical, and through whom I had the opportunity of studying Mr. Lister's Antiseptic treatment in its purity, and I certainly was favourably impressed with what I saw.

Mr. Lister, as many of your readers doubtless know, at present uses almost nothing but the carbolic gauze, and the one to forty watery solutions either in spray or as lotion. The gauze is prepared in immense quantities by an Edinburgh apothecary, with resin, but in what manner, or in what proportions, I could not ascertain, nor do I think it is known outside of his laboratory. It has a faint odour of the acid, but on digesting a small piece in water the latter rapidly becomes impregnated and the acid taste is soon apparent. Mr. Lister performs all his operations, even to a simple incision, under "Carbolic Spray," generated either from a mammoth Richardson's syringe, worked with the foot, or an apparatus on the same principle, having a handle, &c., resembling the ordinary air pump. All dressings, likewise, are applied under the spray, so that the atmosphere surrounding the part is constantly charged with the antiseptic. He applies the gauze, on all occasions, in the manner of eight folds, placing between the seventh and eighth a piece of carbolized oil silk of equal size with the folds, and securing the whole with a gauze bandage. The oil silk prevents the discharges from appearing on the outside and becoming decomposed. I was asked to examine a large portion of dressing from the opening in a case of empyæma, that had been on for two days,

and which was saturated with pus, but I positively failed to distinguish any odour excepting that of the acid. I had almost forgotten to mention that the gauze is applied in a perfectly dry state.

Among the other cases treated by Mr. Lister I was shown one of varicose veins, in which he had injected a strong solution of carbolic acid with marvellous results. A very fine cast of the limb had recently been taken, which showed all the veins standing out prominently, by reason of the firm coagulation that had taken place. I regret that I should have forgotten the strength of the fluid injected, but I am inclined to think it was about one to ten of the watery solution. Mr. Lister washes the walls of all his wards with a preparation of carbolic acid, and whether that is the cause, or whether it is owing to the quantities used in the dressing, certain I am that they have a remarkably sweet odour, so to express it, which is still more noticeable from the number of surgical cases they contain.

The Infirmary itself is a very dingy, antiquated structure, occupying a large area, and appearing, from its general surroundings, more like a prison or house of correction than an hospital. It seems to lack entirely that bright, cheerful character which is so much to be sought for in institutions of this kind. A new Infirmary has, I understood, long been talked of, and is now in process of erection, as the site is secured and the foundation laid, but for want of funds the directors are compelled to postpone operations for the present.

Soon after my arrival in London I fell in with Dr. Brosseau of this city, who kindly piloted me through that mighty metropolis to the various hospitals and other places of interest. He purposes spending some months between London and Paris, in the pursuit, chiefly, of surgical knowledge. I also met Dr. Osler, one of this year's graduates of our McGill University, who is walking the hospitals and preparing to take the Royal College of Surgeons degree. I heard of three or four other McGill men but failed to see them. I have no doubt they will all give a good account of themselves when the occasion serves, and continue to reflect credit on their *alma mater*.

At Guy's Hospital I was fortunate, on one occasion, in witnessing two operations performed by the celebrated surgeon Mr. Bryant; one, amputation of the lower third of the thigh; the other, excision of the hip joint. The first case was diagnosed one of osteo-arthritis, but on opening the knee-joint with the hope of excising, the soft parts were found extensively diseased, consequently the limb was amputated. Mr. Bryant pointed out a remarkably dark,

pulpy condition of the synovial membrane covering the tibia which he had seldom seen so well marked, but which was the best indication of malignant disease. The stump was dressed simply with dry lint, enveloped in cotton wool, and the whole supported on a broad wooden splint. There was nothing remarkable in the excision of the hip, excepting that the wound was not closed in any part, but, on the contrary, stuffed from the bottom with wet lint, so as to cause granulations towards the surface. Mr. Bryant advocates early excision in these cases, and I was led to believe that this opinion was rapidly gaining ground among the London men. It is certainly more reasonable to think that excision, of all other operations, would be more successful where the patient is in comparatively good health than where he is run down by long-continued suppuration, producing amyloid disease and innumerable other troubles.

Moorfield's Ophthalmic Hospital interested me not a little. I was most fortunate in my visit here. The surgeons in attendance were Mr. Lawson and Mr. Cooper, each performing four or five operations, with a description of some of which I would like to occupy a few moments, especially as they were in many respects remarkable.

First.—Case of double Congenital Cataract in a child of three years. Mr. Lawson introduced a needle, and after a very rough handling of the lens succeeded in breaking it up, but the tough capsule still remaining as a foreign body, and resting against the iris where it was certain to produce more or less mischief, he determined on removing it, which he did by simply making an incison with a broad needle in the cornea, just at the margin of the pupil. This, he stated, had lately been his invariable practice where the capsule was likely to act so much the part of a foreign body. The other eye he left untouched for the present.

Second.—Case of aggravated Glaucoma under the same surgeon. He made the usual incision for an iridectomy, but could not by any manœuvre draw out the iris on account of its brittle character, failing which he enlarged his incision and extracted the lens.

Third.—A man who presented himself also to Mr. Lawson, on whose right eye the latter had some month previously performed keratonyxis, but several bands of capsular matter still remained. Mr. Lawson introduced a "stop" needle at one side of the cornea, but failing to sever the obstruction he entered a needle at the opposite side, and by crossing the points, in a second the pupil was free and the man saw clearly. Although apparently nothing in tself, this little dodge might, I think, often be resorted to, not

only in similar cases but where the needle operation is made difficult by a tough capsule.

Fourth.—Case under Mr. Cooper of double Congenital Cataract in a child, resembling, in every particular, the one first described. Mr. Cooper here also used the needle, but failed to make the slightest impression on the capsule, after using what appeared to me almost unwarrantable force. He withdrew the needle, closed that eye, and proceeded immediately to extract in the other, leaving the aqueous humour to accumulate in the first, and there also extract subsequently.

Fifth.—Under Mr. Lawson a case of foreign body, thought to be a particle of iron, lodged in the eye, having entered at the corneal margin, producing traumatic cataract and considerable irritation. Mr. Lawson, in remarking on the case, stated that if he failed to find the foreign body during the operation for extraction which he was about to perform, he would, at the same sitting, remove the entire eye-ball in order to anticipate further destructive action and consequent ill effects to the other organ which would be inevitable. The man being prepared for the sacrifice, the operation, by Graefe's plan, was proceeded with, and on introducing the knife it grated on the foreign body, and when the lens was removed it was found embedded near its margin. The result, of course, was most gratifying, and the lesson taught could not easily be forgotten. The plan spoken of respecting the removal of the eyeball, in cases where the foreign body cannot be discovered, is the one almost invariably adopted by the surgeons of Moorfield's.

In the other operations witnessed there was nothing to note. To my great surprise I found them using ether in fifty per cent. of the operations in this hospital, but I learned that the innovation was of very recent date, and could be attributed to a visit of Dr. Jeffreys, of Boston. They give it very rapidly "choking off" the patient, as the Yankees term it.

Mr. Bader, Ophthalmic Surgeon of Guy's Hospital, was unfortunate in having a death from chloroform during one of his operations, while I was in London. I was horrified at the careless manner in which chloroform is administered at many of the London hospitals, although at Guy's they are certainly a little careful. In many places it is thrown in alarming quantities on an ordinary linen rag and administered without any attention being paid to the pulse and very little to the respiration.

At St. George's Hospital I made the acquaintance of Mr. Brodhurst, the Orthopœdic Surgeon, who took some trouble to show me his many cases of deformity of every imaginable part and in all stages. I was very much interested in his apparatus for the

treatment of spinal curvature. It is most ingenious, though rather complicated, and could not readily be understood from an ordinary description. I would recommend those who are interested in this important branch to invest in Mr. Brodhurst's book, of which a second edition is now in press. It is an excellent treatise on the subject, and, indeed, well worthy of perusal by all. I noticed that all the hip-joint cases, in the early stage, were treated with the extension by weight and pulley, but applied in the simplest manner, without any long side-splint, and, indeed, in many cases without a bandage, the straps of soap plaster being kept in position by a strip or two of adhesive plaster encircling the leg. The child may sit up in bed and amuse itself so long as the weight is doing its work. I found that in London the use of the tenotome in hip-joint disease is a thing of the past, if, indeed, it ever found much favor there.

St. Thomas's is certainly the Prince of Hospitals. I was sorry to learn that the finances of this noble charity are already in a straitened condition, so much so that the managers have been obliged to close two of the buildings. The city corporation taxes alone of this hospital amount to the fabulous sum of three thousand pounds per annum, but there is, I believe, a law-suit at present pending between the two bodies on this very point. The opinion current is that the hospital is altogether too extravagant and can never be supported so as to work it satisfactorily. I was here introduced to Mr. Sydney Jones, one of the Assistant-Surgeons, and of whom I came to think a very great deal as a surgeon and a teacher. I saw in the wards then under his care some ten or twelve hip and knee-joint excisions in various stages of cure. Some of them were certainly most admirable results. He uses for the knee cases the ordinary gutter splint, with a moveable portion opposite the joint to facilitate the dressings, and the hip excisions are put on a side splint having a bracket opposite the joint for the purposes of dressing likewise. A few of the hip cases, I found, had been operated on late in the disease, and the result, of course, was not at all satisfactory. One child was dying from extensive gangrene following excision performed two days previously. The urine was tested in my presence and found to contain a large per centage of albumen, which would, no doubt, account for the unfortunate occurrence.

Among the Canadians and Americans in London St. Thomas's seems to be the favorite hospital, as I met here some eight or ten from both sides of the line. The Canadians were, with one exception, from Ontario.

At St. Bartholemew's I saw Savory and Holden operate, but both the cases were trivial—the one being a cystic tumour in Scarpa's space, the other a fatty tumour on the outside of the thigh. I was much impressed with Savory's appearance and manner as an operator, and the few remarks he made on his case were pithy and easy of comprehension by the merest beginner. Savory has the reputation of being the stiffest examiner in the Royal College of Surgeons, but this peculiarity seems to increase rather than lessen his popularity among the students, on the principle, I suppose, that conciliation is better than force.

Charing Cross and King's College are among the smallest of the metropolitan hospitals. The latter is situated in a densely crowded locality near Lincoln's-in-Fields, and in its immediate neighbourhood is a public market, a condition of things, I should say, very detrimental to surgical cases. In fact, they were just recovering from an outbreak of hospital gangrene which had taken off some of Sir William Fergusson's pet cases. The hospital, however, is admirably equipped, and the nursing is done by the Sisters of St. John's House, an institution now becoming well known for the training of nurses.

The Brompton Hospital for Consumption is well worth seeing more on account of its admirable construction than from anything to be learnt from the cases. It is a large brick building, constructed, in shape, like the letter H, with spacious grounds for the use of the patients, and is heated and ventilated in the most approved manner. I could learn here nothing new, either in theory or practice, respecting phthisis. Imagine two thousand gallons of Cod Liver Oil consumed under one roof in a year. I was startled when this fact was communicated to me by the amiable House Physician who showed me through. I doubt not too much of this good thing may do harm, or Brompton stomachs must be stronger than I have been accustomed to meet under similar circumstances. Lead, Turpentine, and Gallic Acid are the sheet-anchors in hæmoptysis. Although they were beginning to use Ergotine hypodermically with moderate success, they do not depend on the latter remedy in severe cases.

Now, in conclusion, allow me again to impress on the student o medicine the advantages to be derived from a visit to London, the great surgical centre where, according to the elder Stromeyer, live the best surgeons in the universe. Besides, the facilities for comfortable and cheap travel afforded by our excellent Allan's line of steamships is another inducement which, I hope, will be taken ample advantage of by all desirous of so extending their professional knowledge.

With many sincere wishes for the success of your admirable journal, believe me,

Yours sincerely,

T. G. RODDICK, M. D.,

House Surgeon, Montreal General Hospital.

MONTREAL, 12*th October*, 1872.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

Chronic Eczema of the Extremities treated by Local Applications of Potassa Fusa, in Combination with Alteratives Internally. Under the care of DR. MACCALLUM. Reported by Mr. D. A. CARMICHAEL.

O. S., aged 42 years, American, unmarried, a robust looking man, was admitted to the Montreal General Hospital, April 20th, 1872, suffering from a troublesome eruption which was pronounced to be Eczema.

History.—About ten years ago the eruption first appeared on the legs, and in a short time extended over the whole of the upper and lower extremities. He went under treatment at the time, from which he derived much benefit, the eruption entirely disappearing. Continued well for a number of years, when the eruption again made its appearance, consequently worse in character, and in October, 1871, he again sought medical advice, but without any good result following; and in the following April of the same year he was admitted to the Montreal General Hospital, where he remained for a period of four months, when he was discharged cured. Continued well from that time up to date of admission. The second time he remained in hospital for some months, the eruption obstinately resisting treatment, sometimes disappearing temporarily from one part to grow worse in others.

July 3d.—*Present Condition.*—The eruption extends over both upper and lower extremities, consisting of vesicles in some parts and crusts in others, set on a red and slightly inflamed base, and the itching of the eruption being very intense in character. Its principal site is the inner surface of both upper and lower extremities; but very few vesicles or crusts being seen on the external or posterior aspect of the limbs, though on the legs it was pretty

evenly distributed, and in some parts where the eruption had disappeared the skin was thickened and indented, and presented an appearance much like elephantiasis. There were fissures at various parts in this indurated skin, from which a thin fluid distilled, and the whole was intensely itchy. General health seems good, and his appearance indicates a robust constitution.

Ordered Potassa Caustica, grs. v.; Aquæ, ℥j.; to be brushed lightly over the eruption once daily. Also, was ordered to be taken the following mixture:

℞ Hydrarg Bichlor, grs. iv.
Liq. Arsenic, mxv.
Acid Hydrochlor dil., ʒjss.
Aquæ ad., ℥viii.
M., ℥ss., ter die.

He was placed on milk diet, which afterwards was increased to full diet. The treatment was continued during the remainder of his stay in hospital, the Solution of Caustic Potassa being gradually increased in strength from five grains to twenty grains to the ounce of water. The constitutional treatment was steadily persevered in, and in a short time improvement was noticed, the eruption becoming paler in color, less intense itching, and fewer vesicles or crusts being formed. The hypertrophied condition of the cellular tissue gradually disappeared, and the integuments were restored to their natural healthy appearance.

On the 1st of August he was discharged from the hospital cured.

Phlegmasia Dolens. Under the care of Dr. MacCallum. Reported by Mr. W. R. Bigelow.

A. S., aged 32 years, a native of Bristol, England, was admitted to the English Hospital on July 23d, 1872, suffering with Phlegmasia Dolens.

History.—Was born in Bristol, England; been in Canada ten months; parents living; married thirteen years and had seven children; no previous trouble in confinement; was confined in July, 1871, at Point St. Charles, and delivered of a seven months child; cross presentation; had rheumatic fever one month before last confinement; on July 10th, noticed a hard, white, painful swelling which, commencing with the feet, gradually extended to the thigh; Dr. Rodger applied four leeches to the calf of leg.

Upon entering the hospital the left leg of the patient presented a hard, swollen appearance, but with no tension of femoral vein; the pain was intense and continuous; diffuse chloasma of forehead and thoracic region. The leg was enveloped in bran.

July 24th.—Patient placed under care of Dr. McCallum, who ordered one limb to be enveloped with cotton wool and covered with rubber cloth, and prescribed the following mixture:

℞ Liq. Am. Acet., ℥iij.
Liq. Opii. Sed., ℥j.
Aq. ad., ℥vj.

A tablespoonful to be taken every fourth hour. Milk diet.

July 25th.—Patient doing well; leg dressed in cotton wool and wrapped in a rubber sheet.

July 26th.—Same; profuse perspiration of affected limb.

July 27th.—Changed bandage and elevated limb.

July 28th.—Manifest improvement; swelling greatly diminished.

July 29th.—Former prescription abandoned and the following substituted:

Quin. Sulph., grs. j.
Liq. Opii. Sed., mx. } ter die.
M.

Chloasma disappearing.

July 30th.—General improvement; patient allowed one pint of beer.

July 31st.—Leg of nearly normal size.

August 1st.—Limb re-bandaged in flannel; cotton wool.

Extensive Tuberculization of Lungs. A Well Marked Tympanitic Note in Percussion over Left Lung the Day Previous to Death. No Perforation of Lung Discovered at Post Mortem Examination. Under the care of Dr. MacCallum. Reported by Mr. W. Ewing.

E. C., aged 19 years, admitted into the Montreal General Hospital, 27th June, 1872, complaining of a cough. She had never been troubled with it until February last, when she contracted a cold from exposure after being in a warm room. When first attacked she had a chill which continued to the time of her entering the hospital. After the first attack she gradually became worse unttl the 1st of April, being obliged then to remain in bed. When she entered the hospital she was troubled with night sweats and continual coughing at night. No diarrhœa attended these symptoms. Her mother, brother, and aunt died of phthisis.

Physical Signs.—Depression of the chest, (chiefly on the right side); prominent clavicles and depressed supra and infra-clavicular spaces. On percussion, well marked dullness was found over the greater part of both lungs. Auscultation discovered inter-

mediate bubbling rales in the right lung, accompanied by well marked pectoriloquy.

The patient was put under the following treatment: Quin. Sul., grs. ii., ter die., and Cod Liver Oil.

Continuing to grow worse. Another examination was made. In both lungs were found bubbling rales and well marked dullness on percussion. Vomiting set in, which was checked by Bismuth Tris. Nit., ℈i., in six powders; one every four hours. Claret was given, but Port Wine was substituted. Senegæ Ext. Fld., ʒii. Ammoniæ Carb., grs. xxxvi. Aquæ ad., ℥vi. ℥ss. every 4 hours was also given. From an inflammatory condition of the mucous membrane of the throat she could not take food, but beef-juice and brandy were injected per rectum; very little, however, was retained

The most peculiar feature of the case occurred on the morning before her death, (July 28th). A highly tympanitic note was heard on percussion over the axillary, infra-axillary and mammary regions of the left side.

At the post mortem examination both lungs were found to fill the cavity of the chest; there was no effusion of fluid into the pleural sac; on close examination no perforation could be discovered; there was slight adhesion of the apex of the left lung; a large amount of yellow serum was found in the pericardium; no signs of recent inflammatory action were found; both lungs were highly congested and thickly studded with tubercle; there was no signs of pleurisy; the pleural cavity contained no air from perforation; cavities were found in both lungs; all the other viscera were normal, with the exception of the liver, which was slightly enlarged.

Proceedings of Societies.

ANNUAL MEETING OF THE MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held October 5th, 1872.

The Second Annual Meeting of the Medico-Chirurgical Society was held on the evening of Saturday, October 5th, some twenty-five of the members being present.

The meeting being opened the President, Dr. Peltier, read a short *résumé* of the work done during the year, naming, *seriatim*, the papers read, and by whom. They are as follows: Dr. Kennedy,

case of Brain Laceration; Dr. Howard on Thoracic Aneurism; Dr. Sewell on Abdominal Aneurism; Dr. Fenwick on Ligation of Anterior Interosseous Artery; Dr. Girdwood, case of Supposed Criminal Abortion; Dr. David on Locomotor Ataxy; Dr. Hingston on Re-Vaccination; Dr. Reddy, case of Embolism of Middle Cerebral Artery; Dr. Trenholme, Irregular or Spasmodic Contraction of the Uterus; Dr. Drake, case of Erratic Erysipelas; Dr. Fenwick, case of Recurrent Fibroid; Dr. Gardner, Cerebro-Spinal Meningitis; Dr. Howard, cases of Cerebro-Spinal Meningitis; Dr. Reddy, cases of Cerebro-Spinal Meningitis.

The Treasurer submitted a report showing a healthy financial condition of the Society.

The election of officers for the ensuing year was then proceeded with, and resulted as follows:

President, - - - - Dr. R. P. Howard.
First Vice-President, - - Dr. Robert Craik.
Second Vice-President, - - Dr. John Reddy.
Secretary-Treasurer, re-elected, Dr. T. G. Roddick.

Council:

Drs. Fenwick, Godfrey, and Schmidt.

A resolution tendering the thanks of the Society to the retiring officers being carried, the meeting adjourned.

MEETING HELD OCTOBER 19TH, 1872.

This evening was held the regular meeting of the Society, in their rooms, University street, the President, R. P. Howard, M.D., in the chair.

After preliminary business had been transacted the President addressed the meeting as follows:

Gentlemen,—It is quite unexpectedly that I find myself placed in the honourable position of President of this Society, and as it was not sought by me, I conclude that the vote of this Society must be regarded as an evidence of its intention to adopt military usage and grant promotion to its members upon the ground of seniority rather than of merit. I own that it is not as pleasing a reflection now as it would have appeared twenty years ago, when one often wished to look a little older. It is, however, another illustration of the truth that anticipation is often more pleasurable than realization. I don't know how other of the senior members of the Society may have felt, but I confess to the *weakness* hav-

ing now and then assailed me of wishing to be again young, and to be, like many present, just beginning my career in medicine. I may be wrong in my previsions, but judging from the history of the last twenty-five years, the opportunities and advantages to be enjoyed by medical students during the coming quarter of a century will place them far beyond our present highest standpoint. Reflecting that within the time that has elapsed since my student days, the department of Diagnosis has been enriched by the Ophthalmoscope, the Laryngoscope, and the Thermometer, instruments of so much practical value that one wonders what we should now do without them. Reflecting that the domain of Pathology has been extended and illumined by the remarkable facts connected with the rôle of the vaso moter nerves in many morbid processes; by the demonstration and elucidation of the process of embolism, and its many important relations to local and general disease: of the process of the migration of leucocytes, and its relation to inflammation, and even to normal and abnormal nutrition; and of the subject of the inoculation of tubercle in animals, and the new lines of research suggested thereby as to the origin and nature of consumption. Reflecting that it has been further illumined by the propounding, if not proving of the doctrines of the local infection of cancer and tubercle, and even of all inflammatory products; of the local origin of malignant growths: of the dependence of so-called pyæmia upon the presence of either material or septic agents in the blood; of the intimate relation existing between pyrexia and the consumption of tissue and disturbed nervous cotrol: and by the more accurate and philosophic views of the nature of such processes as inflammation, elimination, degeneration: and of the nature and pathology of such diseases as epilepsy, asthma, neuralgia, insanity, paralysis, cerebral softening, and heat exhaustion; and that it has been further extended by the description of several important diseases that had been previously overlooked or misinterpteted, as leucocythemia, Addison's and Hodgkin's disease, cerebro-spinal fever, locomotor ataxia, trichinosis, visceral syphilis, the several affections of accommodation of the eye, astigmatism, and the various diseases of the retina and of the optic nerve. Reflecting that the department of Therapeutics has been improved by the introduction of many new agents, amongst which may be mentioned chloroform, bromide of potassium, sumbul, chloral, carbolic acid, atropia, and Calabar bean; but more especially by the ascertained value of electricity in many forms of paralysis and neuralgia, of bromide of potassium in epilepsy and some forms of insomnia, of large does of iodide of potassium in tertiary syphilis and lupus, of chloral in tetanus, of the cold bath

in hyperpyrexia, of opium and rest in inflammatory affections generally, and, secondary to none in importance, by the practice of the hypodermic method of administering drugs. Reflecting upon these marks of progress, witnessed by myself, I feel safe in asserting that the student of twenty-five years hence will occupy a position of advantage over us that we can now form no reliable estimate of. And I have made no allusion to the remarkable advances that have been made in Chemistry and Physiology during that period, and have passed over the wonderful improvements in Surgery: which embrace amongst other things, those triumphs of Conservative Surgery now familiar to us in excision of joints, in extirpation of ovarian and other tumors, in the cure of aneurism by compression instrumental and digital, by flexion and galvanism, in the revival of the distal operation for aneurism of the subclavian and innominate artery, in the ingenious and successful application of distal compression for aneurism of the mesenteric and iliac arteries, and even the abdominal aorta of itself; in the substitution of lithotrity for lithotomy in adults; in the performance of iridectomy for many eye diseases. And not only these conservative feats, but many others of a different nature, perhaps not so brilliant, but quite as useful; such as the application of the weight and continuous elastic extension in the treatment of fractures and diseases of the joints; in the reductions of dislocations by the so-called rotatory or manipulating methods; the setting of fractures with plaster, starch, gum, and other immoveable materials; the employment of carbolized and catgut ligatures, and the resulting immediate healing of wounds without suppuration; accupressure and torsion of bleeding vessels; the galvanic cautery in the cure of fistulæ, nœvi, etc. But enough of this.

One of the most important uses of such a Society as ours appears to be to be that it tends, or should tend, to prevent those of us who are solely engaged in general practice from becoming careless observers and mere routinists. There is much temptation to this induced by the constant wear and tear of general practice, and a regular attendance upon, and interest in the meetings of this Society would, I think, induce habits of reflection upon one's daily experience, and result in closer observation and better appreciation of the facts transpiring in our practice. We should also be more or less stimulated to contribute our respective mites to the treasury of medical knowledge, and great good would result to ourselves and probably to the "Ars Medica." As members of the medical profession in this, the largest Canadian city, we owe it to ourselves and to the profession to cultivate, carefully

and industriously, the extensive field of observation we possess. It is time that, at least the *nucleus* of a Canadian school in medicine should be formed, and that the doings and sayings of Canadians should be respectfully spoken of and acknowledged in other lands. This Society may do something towards bringing about so desirable an object, and with your permission I will suggest some points that have occurred to me in this connexion: That the members of the Society should make it *a rule* to take accurate notes of important or unusual cases *while under observation*. That during the prevalence of epidemic disease they should, as far as possible, keep *tabulated* records of the cases of such disease coming under their observation, paying special attention to the origin, severity, duration, and mode of treatment of such cases. That the younger members, enjoying more leisure than their seniors, should always have under close observation, and should record, from day to day, the facts of one or more examples of some common disease, employing, in their investigation, the thermometer and the microscope, and analyzing the urine, with a view of reporting to the Society such case or cases when of sufficient interest; and especially for the purpose of accumulating accurate and complete observations of disease. Few reports of cases are complete and exhaustive, and it requires not only a well improved mind but habits of observation which can only be acquired by diligent self-training, to see and apprehend all the facts of any case. The reading of a *well reported* case of any disease, however commonplace, without any original comment or reflection, ought to be gratefully received by this Society, and its author would merit its thanks. Half a dozen such reports upon any one disease would certainly add something to our knowledge of it. I may remind, if not inform, the younger men that they enjoy opportunities of seeing many more cases of epidemic disease, and even of some local affections, than they may when they shall have been ten or twenty years in practice. The poor of the community are the most numerous class, and for that reason, if no other, the larger proportion of persons attacked during an epidemic belong to that class and it is the class in which you must find your chief employment at the beginning of your career. You will frequently see two or three cases of small-pox, cerebro-spinal fever, and even of inflammation of the lungs or dysentery, for one seen by the older men. If you make it a practice to take careful notes of your cases you will be in a position to contribute some of the most valuable papers to the Society, while earning a reputation that must bring its material reward by-and-by. The older members should now and then "take

stock" of their experience, and carefully analyze the results of their trials of certain drugs or certain modes of treatment, and should take pains to note, carefully, the many cases of unusual interest which their enlarged opportunities bring before them. It would be interesting, as well as instructive, to hear the report of a case of embolism, or of embryotomy, or of invagination, or of excision, or of bimanual version. Were the older members to occasionally write out the medical history of an entire family which they had watched for twenty years, particularly in connexion with the subjects of rickets, consumption, cancer, and the like; or the medical history of an individual or of a number of individuals who had had years before an attack of pneumonia or chorea, or rheumatic fever, or anal fistula, or syphilis, what important light might be thrown upon many dark spots in Pathology. That every member, and particularly those connected with the hospitals, should endeavour as often as possible to lay before the Society morbid specimens, whether obtained post mortem or during life. Nothing would be more instructive, and in no other way can busy practitioners hope to keep up and enlarge their knowledge of morbid anatomy.

Finally, I would suggest that when a paper is to be read upon any important subject, the members who intend to take part in the discussion of it should take pains to prepare themselves by the careful study of the subject. In this way much valuable time might be saved and unprofitable and vague discussion be avoided.

I thank you, gentlemen, for the honour you have conferred upon me in electing me your President.

Dr. Fenwick then read a communication on the subject of bronchocele, illustrating his paper by a case which came under his care, and in which he had removed the entire right half of the thyroid body; (this paper will be found amongst the original matter.) After giving a general *resumé* of the history, causes, and treatment—both medical and surgical—of bronchocele, he discussed the propriety of early removal in that form of the disease which is unaffected by internal remedies.

This gave rise to a lively discussion, in which several members participated.

Dr. Hingston asked why, in the case detailed, the operation had been performed? He had seen the woman shortly before she had been admitted into Dr. F's hospital, and he came to the conclusion that it would be extremely hazardous to risk the operation of removal of the mass. When he saw the case the symptoms did not appear to be urgent; therefore he would ask his friend Dr. F. why perform so dangerous an operation? Was it justifiable?

Dr. Trenholm stated that in his reading on the subject the operation was condemned, and that in any case if the jugular vein passed through the tumour its removal was impossible.

Dr. Bessey spoke of the causes of goitre, but did not throw any fresh light on the subject.

Dr. Reddy remarked that he was present at the operation and assisted at it. He believed in this instance that it was justifiable, because the woman had been suffering from distressing breathing, more especially at night; so much so as to alarm those who slept in the same ward.

The President was of opinion that the operation was of so dangerous a character that it should be reserved solely for cases in which the disease had produced symptoms dangerous to life. He admitted that the skill and courage of modern surgeons had proved the propriety of performing formidable operations that had been formerly condemned—the extirpation of ovarian tumours for example. But the cases are not parallel. While ovarian tumours, if not removed, almost invariably progress till they destroy life, that cannot be said of bronchocele—it but seldom proves fatal—it cannot be said to have that tendency. The causes of bronchocele are not yet understood and in the theory now most in vogue, that it is due to some quality of the water used in drinking, such as an excess of lime salts, he objected that in that case men should be as frequently as women the subjects of bronchocele; yet, in Canada the disease was far more common in women than in men. The same fact had been noticed in other countries. Of Dr. Morell Mackenzie's patients there was one male to seven females. Now, this important fact appeared to disprove that goitre depended upon certain qualities of either water, food or air. Some relationship appears to exist between the development of the reproductive organs and goitre. That affection frequently sets in at puberty in both sexes, and is very rarely met with before that period, and seldom, if ever, begins after the cessation of menstruation; and in his experience it does not continue to grow after that period. Copland and others had noticed the connection between bronchocele and the disorder of the uterine functions. The speaker had several times been struck with the apparent dependence of goitre upon frequent child-bearing. He was not aware whether others had observed the same. Iodine is useful in simple bronchocele, unless when very chronic—not at all in the cystic form—and often fails.

Dr. Fenwick, in reply, said that if placed in a similar position he would feel inclined to act in the same manner in which he had acted in the case detailed. He could not see why surgeons shirked

responsibility in cases which undoubtedly demanded all the resources of surgical skill to accomplish; but he would admit that he would not lightly assume the responsibility of so grave an operation, as he fully recognized the importance and difficulty of the procedure. He would simply say the hæmorrhage in the case was something he had never before witnessed, but it was altogether venous. To Dr. Trenholm he would state that in this case the external jugular was imbedded in the substance of the tumour, in the greater part of its course, and was consequently removed. However, the case did well: the woman recovered without a bad symptom; she had, it is true, a slight attack of erysipelas which gave him some concern, but with this exception no further trouble occurred, and he hoped at a future meeting to be able to show the patient to the members present.

The meeting then adjourned.

Reviews and Notices of Books.

The Urine and its Derangements, with the Application of Physiological Chemistry to the Diagnosis and Treatment of Constitutional as well as Local Diseases; being a Course of Lectures delivered at the University College, London, by GEORGE HARLEY. M.D., F.R.S., Fellow of the Royal College of Physicians, &c., &c. With illustrations. Philadelphia: Lindsay & Blakiston. 1872.

"Chemistry," it is remarked in the preface to this work," has become a very important handmaid to medicine, since there are few forms of disease to the diagnosis and treatment of which it may not in some way be subservient; whilst for the due investigation of others, as the entire class of urinary affections, it is absolutely indispensable." The truth of this remark is amply illustrated throughout these lectures, whilst at the same time the intimate connection between the chemical constitution of the urine and the physiological or pathological condition of the secreting organs are never lost sight of. The first two lectures are occupied by a description of the normal constituents of the urine, the variations in them consistent with health, the influence of the most commonly varying conditions in life upon them, and the most approved methods of conveniently analysing and testing for the most important ingredients. In the following chapters these

ingredients are taken up and discussed *seriatim*, the arrangement adopted making the matters treated of very clear and easily understood. After each one has been described and the process of analysis required for it given: then, a special division is devoted to the Chemistry of the same; another for the Physiology, and another for the Pathology, and generally a fifth section is added for the treatment of the diseased conditions in connection with its presence or absence. The immediate juxta-position of the bearings of each branch of medical science upon a given point makes the matter extremely systematic, avoids all confusion, and shows, distinctly, the relation of each with the other. Sections X. and XI. are devoted, respectively, to the important subjects of Diabetes Mellitus, and Albuminuria, and occupy nearly one-half of the book. Of the first of these subjects, the author truly observes: "In no department of experimental research have results of greater value to the Clinical physician been recently obtained than in that connected with the study of animal saccharine matter. Within the last few years—indeed, since 1848—an entire revolution has taken place in our ideas of the physiology and pathology of Diabetes: and although we have still much to learn before we can completely unravel the skein of laws regulating the formation and destruction of sugar in the animal economy, we have, nevertheless, reason to congratulate ourselves upon that which has been already achieved, and be sanguine in our expectations of what science may yet accomplish." The subject of sugar in the urine is then fully explained in all its bearings, together with all the most recent discoveries concerning it, and the results of most of the novel methods of treatment which have been recommended in this most fatal disease, which, unfortunately, we are bound to still rank amongst the now reduced list of "incurables." The chapter on Albuminuria will especially repay perusal. This subject, which, particularly to the student, at the beginning presents such peculiar difficulties, and which often is rendered peculiarly obscure by the very attempts to throw light upon it, is here exhibited in such a form as can scarcely fail to attract the attention, and at the same time to cause itself to be fixed in the memory. Much of this is due to the sound and practical division of Albuminuria which is presented to the reader at the outset. Dr. Harley divides Albuminuria into *primary*—(cause originating in the kidney), and *secondary*—(cause not originating in the kidney). The *primary* is then subdivided into the temporary and permanent—(Bright's disease), and the *secondary* into four subdivisions, according as the presence of the albumen is due to derangements of the digestive or nervous systems, or from organic disease, or from general affections.

This book is one which we can confidently recommend to all students and junior practitioners who desire to acquire a good, practical, and thoroughly useful knowledge of the common urinary affections, and the means to be employed for ascertaining their presence.

A System of Surgery; Pathological, Diagnostic, Therapeutic, and Operative. By SAMUEL D. GROSS, M.D., LL.D., D.C.L., Oxon; Professor of Surgery in the Jefferson Medical College, Philadelphia, &c., &c. Illustrated by upwards of fourteen hundred engravings. Fifth edition: greatly enlarged and thoroughly revised; in 2 vols: Imperial, 8vo; Vol. I., pp. 1,098; Vol II., pp. 1,170. Philadelphia: Henry C. Lea. 1872.

This work is too well known and highly appreciated by the profession generally to require, at our hands, an extended review; we must, however, remark that this, the fifth edition, may almost be regarded as a new work, as many of the chapters have received, at the hands of the very eminent author, a thorough revision. We have on a former occasion expressed our views as to the practical character of this excellent treatise. As the author states in his preface, this work must be regarded as embodying the results of a large personal experience, of extended reading, and much reflection. It sets forth the science and art of Surgery as the author himself understands it, and as he has for so many years conscientiously taught it. The subjects of inflammation, and its results have received more attention in this than in former editions, because "of the conviction, grounded upon long and close "observation, that there are no subjects so little understood by "the general practitioner" Professor Gross is decidedly a sceptic as to the vaunted use of antiseptic dressings in Surgery. Although freely admitting the correctness of the views advanced by Pasteur and others concerning the existence of low forms of organisms, yet he does not admit that living disease-producing germs, have been satisfactorily proven, and he states that experience has convinced him, beyond a doubt, that "abscesses may be "opened, that wounds—as those made in the removal of tumours— "may close, and that compound fractures may unite as rapidly "without as under the use of antiseptic agents." These remedies he has, therefore, of late employed, "not to prevent, but merely "to arrest the process of putrefaction, and to destroy its products." These views are correct so far as they go, and although not by any means a follower of Lister, yet we freely admit that faithfully employed antiseptic dressing of wounds has yielded surprising results in the hands of many able surgeons.

The author acknowledges the aid received from Dr. S. W. Gross in re-casting several portions of the work, to Dr. William Thomson for his aid in revising the section on Disease of the Eye, and to Dr. Barnes, Surgeon-General United States Army, for the use of many wood-cuts which are to be found illustrating the subject of gunshot wounds.

Upwards of six hundred engravings in this edition are original and new. Indeed, the present edition has received such careful revision as to enhance its value and render it second to none as a work for reference on the subject of which it treats.

BOOKS RECEIVED FOR REVIEW.

The Science and Practice of Medicine. By WILLIAM AITKEN, M.D., Edin.; Professor of Pathology in the Army Medical School. Third American from the Sixth London edition. Greatly enlarged, remodelled, carefully revised, re-written: adopting the new nomenclature and following the order of classification of diseases published by the Royal College of Physicians of London. With additions by Meredith Clymer, M.D., (Univ. Penn.) ex-Professor of the Institutes and Practice of Medicine in the University of New York, &c., &c. In two volumes, with steel plate map and one hundred and eight wood-cuts. 8vo. Vol. I., pp. 1,056. Vol. II., pp. 962. Philadelphia: Lindsay & Blakiston. 1872.

Epidemic Cerebro-Spinal Meningitis, with an Appendix on Some Points on the Causes of the Disease, as Shown by the History of the Present Epidemic in the City of New York. By MEREDITH CLYMER, M.D., (Univ. Penn.) Fellow of the College of Physicians of Philadelphia, formerly Physician to the Philadelphia Hospital, ex-Professor of the Institutes and Practice of Medicine, University of New York, &c., &c. 8vo., pp. 59. Philadelphia: Lindsay & Blakiston. 1872.

The Thames Shipping Inspection Committee, at its concluding meeting at the Guildhall, endorsed all the arrangements that had been entered into with the Admiralty and the Privy Council for providing a cholera hospital on the river, and for ensuring the prompt isolation of any case of the disease which might be imported.

At Malmo a post-mortem examination of the King of Sweden disclosed a chronic inflammation of the entire alimentary canal, with sporadic ulceration. Milk had for a long time been the only nutriment his Majesty could take.

CANADA

Medical and Surgical Journal.

MONTREAL, NOVEMBER. 1872.

SEWER CLEANSING AND VENTILATION.

At a recent meeting of the Social Science Association held in Plymouth some most interesting and instructive papers were submitted which all tended to show that what has been termed the great sewage question remains unsettled. From a perusal of a synopsis of the various papers read at that meeting, we are forced to admit that all the various schemes for working sewage matter so that it can be utilized have failed. Air, water and food are essential to the continuance of animal life, but if the air be vitiated, the water polluted, and the food unwholesome the most disastrous results follow. The necessity of sufficient breathing space for the maintenance of animal life has been time and again proved since the little experiment at Calcutta of cramming 146 prisoners into a dungeon of 18 feet square, whence in the course of a few hours 23 only came forth alive. But space is not the only requisite for the maintenance of health, the air itself should be pure, at least sufficiently so to ensure a due performance of those functional changes necessary to sound health. We have before alluded to the condition of our sewers, the absence of what we consider a proper system of sewer ventilation. Our sewers are ventilated it is true, but they are ventilated at the street corners so that in reality it would be far better if they were open, than, as at present, partially closed.

We have spoken of the generation, in enormous quantities, of most noisome sewer gas which under the present construction is unavoidable. The whole of this gas or a large proportion of it passes into the atmosphere at the gratings of our street corners, thus affecting the air of our city. How injuriously this acts can be calculated by reference to our bills of mortality. What is to prevent our Corporation utilizing the many tall factory chimneys which are to be met with in our city, or at the higher levels of the city, erecting shafts sufficiently high to get rid of the sewer gas, without injuriously acting on the air of our dwellings?

We have noticed that various schemes have been proposed to utilize our city sewage and individuals have offered for a consideration to relieve us of the nuisance. Before anything is attempted it would perhaps be better for our Corporation to wait and see the results of various experiments which are engaging scientific men abroad.

It is computed that the best means of purification of sewers is flushing them with water and it has been stated that to be efficient about 30 gallons per head per day are necessary. This would give a daily consumption in our city of over four million gallons, but if we cannot secure the necessary quantity of water or if it is unequally divided we must then adopt other measures to remedy an evil which is becoming a reflection on our civilization.

But have we not at hand the means of flushing the sewers without being forced to use the water of our reservoir. What is to prevent the utilization of the waste water from the canal. On several occasions we have noticed the Craig street sewer emptied out by buckets, the mass of filth dumped down in the middle of the street to be lazily removed by carts, thereby arresting at various points the street traffic and contaminating the air of the locality with the stench of sewer gas Indeed if we remember right on one occasion there was nearly a fatal accident occurred; one of the workmen employed, who in descending into the sewer was almost asphyxiated by the gas. The Craig street tunnel is in construction no credit to the engineering skill of those who built it, and we think it could be greatly improved upon by sinking it deeper and giving it an outlet at the foot of the St. Mary's current, and then if the waste water of the canal was allowed to flow through it continually we would he enabled to get rid of all the greater part of our sewage matter without as at present retaining it in the sewers where it is constantly fermenting and generating a highly poisonous compound.

We believe that nearly all the sewers in the upper part of the city lead down to the Craig street tunnel, which is the principal artery in our system of drainage. It is we believe of size enough for the purpose but if it were six feet deeper and had a sufficient fall from west to east with an exit at Hochelaga, and furthermore a continuous stream of pure water flowing through it, the difficulty would be solved, and the air of the whole city greatly improved.

EPIDEMICS AND METEOROLOGY.

We copy the following portion of the Report of the Philadelphia County Medical Society on Epidemics and Meteorology, for 1871, because the subject is of great import; for there can be no

doubt that atmospheric changes have considerable influence on the state of the public health, even though the manner and extent of their operation cannot be truly ascertained. Most medical men admit that there are varieties in the state of the atmosphere with which the prevalence of disease are conjoined, so that the said disease may be referred to its agency; and further, that it is possible that there may be different states of atmosphere which act as specific stimuli, and produce their corresponding peculiar diseased nervous actions; having, as it were, a joint cause, and being further varied by the particular state of the constitution and other circumstances of the patient.

Even contagious diseases break out at very uncertain periods, and often without any obvious cause. Small-pox rages for a time throughout whole tracts of country; at others there is scarcely a case to be met with. The same may be observed of Scarlatina and Measles. This is not merely the effect of accidental introduction. It is more probably due to some quality in the air, whereby it is fitted for the conveyance of infectious matter, or the effect of a peculiar state of the atmosphere which renders the body more susceptible of infection than ordinary.

Be it as it may, the subject of epidemics connected with meteorology deserves more attention in the Dominion than it has hitherto received; and we hope the careful reading of the following extract may induce the faculty to well consider the subject of the Meteorology of the City of Montreal, and its relation to the prevailing diseases amongst us:

"The careful and extended meteorological observations now "made by means of the telegraph in various portions of the "world, should increase our knowledge of the causes of disease, "more especially of those fearful epidemics which destroy so many "of the human race. Even by the study of the simple agents, "as, for instance, heat, cold, the winds, etc., much is learned of "their influence for good or evil on mankind. This is no fancy "sketch, for already an intimate acquaintance with the winds shows "what an important part they play in a medical point of view, in "controlling humidity and cooling an intensely heated atmos-"phere; at other times in dissipating miasma, by carrying it to the "upper regions, so that man is not affected by it. Numerous "observations by careful physicians prove that the east wind "induces biliary derangement, with depression of spirits, while all "have felt the bracing influence of a northwest wind; and again, "the south or southwest wind induces languor of both body and "mind. The barometric indications should be carefully noted, for "the indications of increased or diminished atmospheric pressure

" causes diseases of the brain, heart, or lungs; for in the first it " produces fatal apoplexy, in the second, capillary engorgement " and severe hæmorrhage by exudation, which can all be avoided " by preventing the patient from taking protracted or severe exer- " cise. Hygrometric observations proper, or the study of the wet " and dry bulb thermometer, show the moisture or dryness of the " air, its effects upon croup, diphtheria, &c., and the great alter- " ations in size which epithelial and ligneous structures undergo " by the addition or subtraction of it. Intense heat, either from " the sun's rays or from a heated room, produces heat-apoplexy, " or thermic fever, frequently followed by local congestion of the " lungs or brain, and may even terminate in sudden death. Intense " cold causes paleness of the surface, with fainting, also coagula- " tion of the fluids of the body in the extremities, and death. " Still more fearful results are known to follow the combination of " cold and moisture on large numbers of individuals, even when " the thermometer does not fall much below the freezing point."

" Electricity, in the form of lightning, is a cause of disease and " death, and it is believed by good and careful observers that a " number of diseases are produced, either by the sudden abstrac- " tion or slow subduction of electricity from the body."

" By examining the clouds as originally classified into cumulus, " cirrus, etc., in conjunction with the use of the rise and fall of " the barometer, valuable information may be obtained by the " physician as to whether he should allow a patient to pass into " the open air for exercise, recreation, or travel."

A NEW TEST TO PROVE THE PRESENCE OF ACTUAL DEATH.

In a recent number of Virchow's Archives, Dr Hugo Magnus of Brislau contributes a paper in which he proposes a new sign of the presence of actual death which is of interest to students of medico-legal science. It is claimed to be a positive and unerring sign of death and at the same time requires no medical or surgical lore in its application. It is based on the presence or absence of the circulation of the blood. Various methods have from time to time been employed such as opening a vein or artery or Brachet's method of puncturing some of the capillaries, these however have never been regarded with favour and consequently have fallen into disuse.

Dr. Magnus test is as follows :

" If a limb of the body — a finger is best for the purpose — be constricted by a strong ligature, quite tightly, there will, if the subject be yet alive, be seen a reddening of the constricted member. First the part in question becomes red, and then the

red colour becomes darker and darker, and deeper in hue, till it is finally converted into a bluish-red, the whole limb being, from its tip to the ligature which encircles it, of a uniform colour, except that at the region immediately round the ligature itself there is to be seen a narrow ring, which is not bluish-red, but white."

DEATH OF DR. JOHN DICKSON.

It is with regret and deep sympathy for the friends that we announce the death, by cholera, of Dr. John Dickson. son of Dr. J. R. Dickson, of Kingston, C. W. This promising young man studied for one or two years at McGill University, after which he graduated at the University of Queen's College, Kingston, from thence he proceeded to London, England, where he pursued his studies, and subsequently received an appointment, after an excellent competitive examination, as Staff Assistant Surgeon. We copy the following extract from the *Broad Arrow* of September 14, 1872:

"While on duty at Allahabad, India, Staff Assistant Surgeon Dr. Dickson was attacked, on the 11th ult., and for some hours was doing well, but a relapse set in and he expired on the morning of 13th, and was buried the same evening.

"The funeral was attended by all the officers of the station; the band of the Second Battalion, Nineteenth Regiment, and a firing party of the same regiment attending.

"General regret is felt at his untimely end, as he was a favourite with all who knew him, skilled in his profession, amiable in his manner, and a perfect gentleman. He is really a loss to the service and the department he belonged to." * * * *

Medical News.

VENTILATION OF LAW COURTS.

The following appears so appropriate to our own ill-ventilated court rooms that we copy it from the *Lancet* of October 12:

"The death of Justice Willes by his own hand is generally, and we think truly, regarded as the result of mental aberration consequent upon physical disease incurred, or at least intensified, by secondary causes. Among these the bad ventilation of the law courts in which he spent so much of his intellectual activity is undoubtedly one. Why it is that these places of resort should, as

a rule, be well-nigh poisonous to their inmates from their foul air is a mystery to the medical mind. Dr. Angus Smith in his classical work on 'Air and Brain,' records a visit to a London court which at the moment of entering was extremely warm and unpleasant, and after some minutes intolerable. He stayed long enough to collect specimens of the air, which he found, on analysis, to contain a smaller amount of oxygen than any place above ground, 'except the gallery of an extremely crowded theatre at half-past ten at night.' But, he adds, the court air was still worse than that of the theatre, its temperature being very high, and the organic matter from perspiration in proportion. A handkerchief which had wiped from one of the windows a little of the animal steam by which they were dimmed smelt offensive afterwards. Law reform is a large subject, but the improvement of the courts in which it is administered ought to find a place in its programme. We are afraid to thing of the valuable lives which may be slowly yielding to influences like those so disastrous to Justice Willes—bad air breathed during mental strain of the severest kind. How long will it be before the judge on the bench is as well off in the matter of oxygen as the prisoner in the gaol?

BEQUESTS, &c., TO MEDICAL CHARITIES.

Mr. Joshua Satterfield, of Alderley, bequeathed £10,000, free of legacy duty, to endow or benefit a Convalescent Home in the neighbourhood of Manchester. The National Orthopædic Hospital, Great Portland street, has received a second £1,000 from "E. D." The executors of the will of Mr. Thomas Dutton have, in the exercise of a discretionary power, given £250 to the endowment fund of the Blackburn Infirmary. The Infirmary of Epilepsy and Paralysis has received a second £1000 from "G. S." Mr. Edward Caddick has given a second £200 to the endowment fund of the West Bromwich District Hospital, The General Hospital, Birmingham, has received £200, under the will of Mr. G. Smith. G. S. Rotherham, Esq., has given £100 towards the funds of the Convalescent Home, Stillorgan, near Dublin.

[We publish the above as an illustration of the princely liberality of those who are able to assist the charitable institutions of London. We wish a few liberal hearts would do as much for some of our charities.—ED.]

The Report of the Oxford delegates on the "unattached" student scheme states that a careful student can get through his Oxford career for a sum not exceeding £50 a year.

Sir William Hamilton has suffered so severely at Simla from dengue that he shortly intends coming to England.

Monthly Summary of Meteorological Observations taken at No. 26 Beaver Hall, Montreal, by THOS. D. KING:

AUGUST, 1872.						SEPTEMBER, 1872.					
Day of Month.	Daily Mean Temperature, 7 a.m., 2 p.m., 9 p.m.	Daily Mean Humidity between 7 a.m. & 9 p.m.	Daily Mean Barometer corrected to sea level.*	State of the Weather.	Quantity of rain gallons per acre.	Day of Month.	Daily Mean Temperature, 7 a.m., 2 p.m., & 9 p.m.	Daily Mean Humidity between 7 a.m. & 9 p.m.	Daily Mean Barometer corrected to sea level.*	State of the Weather.	Quantity of rain gallons per acre.
1	65.8	51.6	30.06	Clear	....	1	64.1	60.5	29.94	Clear	....
2	69.1	72.2	29.99	Rain	9275	2	59.9	67.6	94	Rain	5949
3	62.5	83.9	30.02	Cloudy	....	3	53.1	60.8	30.07	Clear	....
4	66.3	60.8	22	Clear	....	4	55.6	60.4	02	Clear	....
5	72.1	52.7	24	Clear	....	5	61.7	71.3	29.93	Cloudy	....
6	75.1	61.8	14	Rain	67	6	68.8	73.5	96	Hazy	....
7	75.8	62.7	15	Clear	....	7	71.9	87.0	90	Rain	47508
8	78.6	68.2	16	Rain	3573	8	71.0	85.6	96	Rain	14352
9	80.4	58.1	10	Clear	....	9	64.7	72.0	30.25	Cloudy	....
10	73.3	76.0	29.99	Rain	9161	10	65.2	81.1	30	Rain	inapp
11	70.6	66.6	30.12	Rain	226	11	64.9	89.7	24	Rain	....
12	75.3	58.3	13	Clear	....	12	72.3	86.5	05	Cloudy	....
13	76.9	71.6	01	Rain	2714	13	65.1	88.5	29.98	Rain	15270
14	73.1	85.5	29.98	Rain	3393	14	60.3	76.8	30.24	Rain	3958
15	75.3	72.1	30.03	Rain	4039	15	59.0	72.2	27	Clear	....
16	72.4	65.8	19	Clear	....	16	57.4	85.9	07	Rain	2375
17	71.3	76.5	05	Rain	2714	17	59.9	89.4	01	Cloudy	....
18	72.9	74.5	10	Rain	6559	18	59.7	80.4	29.93	Rain	3438
19	73.8	62.6	24	Clear	....	19	58.7	87.5	74	Rain	13835
20	74.8	65.7	29	Clear	....	20	56.8	76.6	90	Cloudy	....
21	78.2	63.9	12	Rain	....	21	55.6	68.3	30.01	Clear	....
22	75.8	83.3	29.88	Rain	8144	22	65.9	73.0	04	Cloudy	....
23	75.0	50.0	30.02	Clear	....	23	59.2	66.8	32	Rain	inapp
24	74.1	53.8	07	Clear	....	24	63.9	87.6	21	Rain	27261
25	75.9	57.9	03	Hazy	....	25	69.1	75.7	05	Rain	9275
26	76.1	62.9	02	Clear	....	26	60.2	70.5	01	Cloudy	....
27	71.8	68.5	29.97	Rain	4825	27	59.9	73.0	29.99	Clear	....
28	68.9	49.3	30.10	Clear	....	28	54.1	74.9	16	Cloudy	....
29	66.9	55.9	29.97	Clear	....	29	57.1	74 7	29.95	Rain	6787
30	57.9	83.3	64	Rain	22141	30	54.4	74.5	96	Cloudy	....
31	56.7	80.5	29.70	Rain	3393	..	....	....	.....	.....	....
MEAN	72.0	66.3	30.05			MEAN	61.6	76.5	30.03		

AUGUST.

Extreme Range of Temperature 41.3
Highest point of Thermometer on Friday, the 9th 92.3
Lowest point of Thermometer on Saturday, the 31st 51.0
Extreme Range of Barometer 0.74
Highest Reading of Barometer on Tuesday, the 20th 30.35
Lowest Reading of Barometer on Friday, the 30th 29.61
Extreme Range of Humidity (Saturation 100) 63.4
Greatest Moisture in the air on Thursday, the 22nd 96.5
Least Moisture in the air on the 28th 33.1
Whole amount of rain in the month ..... 3.703 inches
General direction of the wind ..... Variable

SEPTEMBER.

Extreme Range of Temperature 39.7
Highest point of Thermometer on Saturday, the 7th 85.0
Lowest point of Thermometer on Wednesday, the 4th 45.3
Extreme Range of Barometer 0.66
Highest Reading of Barometer on Tuesday, the 10th 30.35
Lowest Reading of Barometer on Thursday, the 19th 29.71
Extreme Range of Humidity (Saturation 100) 54.8
Greatest Moisture in the air on Friday, the 13th 97.2
Least Moisture in the air on Sunday, the 1st 42.4
Whole amount of rain in the month ..... 6.668 inches
Greatest amount of rain in 24 hours on Saturday the 7th—thunderstorm—2.130 in.
General direction of the wind ..... Variable

* Not for Temperature.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Some Observations upon Scarlatinal Pleurisy and upon Thoracentesis in that affection. By R. P. Howard, M.D., L.R.C.S.E.; Professor of Theory and Practice of Medicine, McGill University.

(Read before the Canadian Medical Association in September, 1872.)

It is well known to practical physicians that acute pleurisy is, in children, a rare affection, as compared with its frequency in adults; it is even more rare as a complication of the eruptive fevers. Having, in the year 1864, during the prevalence of Scarlatina, met with several cases in which acute pleurisy supervened during the course of that fever; and as the complication is a serious one: as the inflammatory products appear generally if not invariably to differ from those of ordinary pleuritis; as the subject has not attracted the attention that it merits; and as the cases suggest some points of practice, I have ventured to bring them before the Association.

Case I.—A pale, delicate girl, of 8 years, took scarlatina anginosa in the latter part of March, 1864. The case was severe; both ears discharged pus, and her nose bled profusely, at intervals, for two or three days; so that I feared she would sink. About this time she complained of pain in the left breast, and on examination the left side proved universally dull, the respiration absent, the intercostal spaces filled up smooth and widened, and the heart displaced to the right nipple. She had had slight pain in the right side for a short time previously.

Recognizing the presence of pleuritic effusion a generous diet, sinapisms to the chest, and a mixture of iodide of potassium and bark were prescribed. Soon after, the Unguent, Iod. Pot., was rubbed in three times a day. I ought to have mentioned that about the time of discovering the pleuritic effusion the left lower extremity was œdematous and that the œdema extended up to the

body; the urine was scanty and high-colored, but its chemical characters were not taken. As her strength failed rapidly, her breathing was short, and no signs of absorption had appeared after *six weeks* treatment, I resolved to tap the chest, and did so on the 20th May by a direct plunge of the trocar into the eighth intercostal space, in a line with the inferior angle of the scapula. A little over a pint and a half of healthy *pus* escaped when air began to enter the chest, and the trocar was withdrawn and a bandage applied. Wine, *ad libitum*, egg-nogg, and animal broths were ordered at short intervals, and the tonic mixture was continued.

May 24th.—Orifice closed; no discharge of pus since 20th; the percussion dulness extends as high as the spine of the scapula; the bulging of the second and third left intercostal spaces in the the infra-clavicular region is as great as before the tapping; pulse very weak and frequent. I thrust a *large* trocar through the former opening, and evacuated two and a half pints of healthy pus, and the left chest filled with air. Left the wound open.

26th.—Orifice closed; blowing respiration audible as low as the puncture; coughs more; œdema of legs increasing; eats better, and drinks about ten or twelve ounces of wine daily.

28th.—To have a mixture of muriated tincture of iron, quinine, and chloric æther, three times a day.

29th.—In great distress from pain while coughing; the tumour upon left mammary region emits a dull note on percussion over its lower half, owing to the presence of fluid, and a clear one over its upper half, from the existence of subcutaneous air. Made an incision into the tumour about the lower border of the fourth rib, and gave exit to two tumblersful of odourless pus; the opening in the back likewise discharged about two ounces of pus. Air escaped from the anterior incision during coughing. To have one-eighth grain Pulv. Opii., *pro re natâ*, to relieve pain and cough.

31st.—Easier; no cough; no expectoration; a very liquid mucous râle audible in left infra-clavicular and lateral regions, proving partial expansion of the lung; a little thin pus escaping from the anterior incision.

June 2nd.—Only a small quantity of discharge from anterior orifice; not any from the posterior; lower half of chest dull on percussion, but a mucous râle audible to day in left infra scapular region; heart in its natural site; pulse 156, weak; œdema of lower extremities much reduced.

June 4th.—Cough reduced to one paroxysm a day; scarcely any bubbling to be heard in left chest; appetite very good; has sat up for last three days.

This child steadily improved and regained her health.

In this first case of scarlatina then, let it be noted that about the same time that the anasarca appeared, acute pleurisy set in with effusion, and after six weeks of unsuccessful treatment thoracentesis was performed on the 20th May, and *pus* was evacuated. The operation was repeated upon the 24th and upon the 29th: signs of expansion of the lung existed on the 31st, and the child recovered promptly.

Case II.—On the 21st May, 1864, and about nineteen days after the invasion of mild scarlatina, a fine child, aged 3 years, presented the symptoms of general dropsy. A dose of compound powder of jalap every other morning, a warm water and soap bath every night, and a solution of acetate of ammonia every four hours were ordered.

The anasarca did not increase: but about the 27th I noticed that his cough, which had been slight on the 22nd, was marked, and on examining the chest discovered almost wooden dulness and feeble respiration all around the lower half of right chest, and a clear note on percussion over the upper half; the breathing rather short and frequent, and decubitus towards affected side. A mixture of Iodide Potassium and Liq. Ammoniæ Acetatis was ordered: the side to be rubbed three times a day with Ung. Iodid Potass.

June 1.—Right side of chest much enlarged, and its intercostal spaces on a level with the ribs; expansion movement much reduced: the whole of that side emits a wooden dull note, except close under the clavicle, where it is of a modified, tubular character; respiration audible all over the right chest, but feebly over its lower two-thirds; hyper-resonance, with exaggerated respiratory murmur over left chest; decubitus altogether on the right side; frequent cough; anasarca stationary. Treatment continued.

On the night of the 7th June the father called to say that about two hours previously his child had *suddenly* become weak, his face pale, and his breathing embarrassed. Ordered frequent sinapisms and a mixture of Aromatic Spirits of Ammonia with Sweet Spirits of Nitre, and a little gin punch.

8th.—Has been easier since 1 a.m.; is now anxious; the lips are blue, eyelids puffed, and features tumid; much firm œdema of right (depending) arm, leg and side of body; less upon left side; pupils widely dilated; pulse very weak and frequent; right chest even more enlarged than heretofore; fine and coarse bubbling over lower third of *left* lung, and to this complication I attribute the sudden increase of dyspnœa.

5 p.m.—Tapped the right chest with small trochar in eighth interspace, in line with inferior angle of scapula, and evacuated

a pint of healthy pus. As the matter no longer escaped during coughing the trocar was removed Owing to the child's weakness the chest was not thoroughly examined, but I noticed that as it lay upon the right antero-lateral aspect of the body, percussion elicited a somewhat amphoric resonance over the middle of the right back, and in the same region existed large, hollow bubbling, hollow blowing respiration, and cough with metallic echo.

9th.—Passed restless night; decubitus as before; right side prominent: the right infra-clavicular region markedly so; opening made by trocar not closed; pressure produces a tiny stream of pus.

10th.—Mother thinks child easier: the mucous rales at left base have disappeared, but the right chest is dull to the level of the first intercostal space, where percussion produces a modified amphoric note: intercostal spaces widened. As the puncture had ceased to discharge I thrust the trocar through it and evacuated a little over a pint of healthy pus, devoid of unpleasant odour, when the chest at once became resonant as low as the level of the puncture, and the same physical signs which followed the previous tapping and indicated the existence of hydro-pneumo thorax supervened. The enlargment of the right chest has disappeared. ℞. Ferri Mur. Tinct. ℥ii., Cinchonæ Co. Tinct. ℥iss., Limonum Syrupi ℥ii. m. A teaspoonful every three hours.

15th.—Signs of pneumo thorax over upper two-thirds of chest: dulness, with feeble respiration over lower third; whistling and snoring rhonchi, and much bubbling over *left* back, especially inferiorly; right lateral decubitus: pulse frequent; skin harsh; sudamina here and there; œdema of hands and feet; much wasting. To continue mixture, and have a couple of raw eggs in milk during the day.

19th.—Has not taken the eggs, but has drunk milk freely, yet is much weaker and very pale; apparently the effusion into the right pleura has not increased, but mucous râles are more numerous and more extensively distributed over left lung. The child sank rapidly during the night. No autopsy was permitted.

In this second case, a few days after the invasion of scarlatinal dropsy, the signs of effusion into the right pleura were discovered. Nine days later the infant was suddenly seized with symptoms of apnœa, probably due to the co-existence of general bronchitis in the uncompressed lung. The child was tapped upon the tenth and again upon the twelfth day after the detection of the signs of effusion; pus was evacuated in abundance, affording some temporary relief, but death ensued nine days subsequently, owing, I doubt not, to the extensive bronchitis which involved the uncompressed lung.

Case III.—Empyema Secondary to Scarlatina-Thoracentesis—Recovery.—In the Spring of 1864 I was requested to see a liltle girl about 6 years old, from whose history it appeared that she had had a few weeks previously mild scarlatina; that after desquamation she did not convalesce, but became paler and grew weaker; pain in the side and dyspnœa supervened, and at the end of three or four weeks my opinion was asked. On examination the physical signs of copious effusion into the left pleura were found, and as the child was very weak and rather hectic I at once tapped the chest and evacuated a large quantity of pus. It was not necessary to repeat the operation. The orifice remained open a few days; the pus did not re-accumulate, and the child made a prompt recovery.

Case IV. — Scarlatinal Dropsy with Empyema — Expectoration of the Pus — Recovery.—In March of the same year as that in which the preceding cases occurred, while attending a child about two years old for scarlatinal dropsy, acute pleurisy of the side arose, and was followed by the signs of copious effusion. The anasarca gradually disppeared under the employment of drastics and diaphoretics, but the distress of breathing and signs of pleuritic effusion persisted for some time in spite of the usual remedies. One day, however, a large quantity of pus was suddenly *expectorated* with great relief; more or less pus continued to be coughed up every day for two weeks; the enlargement of the side, the dulness, and other signs of effusion disappeared, and the child gradually recovered.

It will have been observed that in all these cases the inflammatory products proved to be purulent, constituting the condition known as empyema, a circumstance which at the time much attracted my attention, and of which since then I have always spoken to my class when lecturing upon scarlatina or pleurisy. I am not aware if other observers have noticed the same thing in scarlatinal pleuritis, but I have no doubt that my cases have not been exceptional. Some of our latest pathologists have stated that the inflammatory products of pleurisy are more apt to be purulent in children than in adults, and some of them have alleged, also, that *secondary* pleurisy in children is commonly purulent. The first of these general statements, in my opinion, requires confirmation, as I am under the impression that it is based rather upon the results of the operation of thoracentesis, and upon post-mortem examination than upon purely clinical observation. Were the inflammatory products of pleurisy in children usually purulent, it would very probably be more often fatal than it is, and the operation of thoracentesis must have been more frequently practised on children

than it has been. Be this as it may, one reason may be drawn from analogy explanatory of the tendency of scarlatinal pleuritis to produce pus. It is known that in Bright's disease the inflammatory process upon serous membranes and in the lungs is prone to issue in suppuration and occasionally in gangrene. It may well be, then, that it is the abnormal state of the kidneys in scarlatina, or the general condition caused by that state, (the acute Bright's disease), that renders pleuritis in scarlet fever prone to produce empyema. In three out of four cases that I have related anasarca existed when the pleurisy set in. Not having accurate notes of the remaining case I am unable to say whether it was present or not in it.

A study of the foregoing cases appears to me to justify the following conclusions or propositions:

1st.—That the pleurisy of scarlatina is usually—not to say invariably—an acute empyema.

2nd.—That in *scarlatinal* pleurisy, when the signs of effusion are marked and do not promptly disappear, it is well to make an exploratory puncture of the chest at a much earlier period than is even now customary in *ordinary* pleurisy following *exposure*.

3rd.—That tolerably prompt and, at the same time, complete recovery of the lung may be expected under these circumstances, chiefly because the inflammation is *acute* and *recent*, and that the vital powers have not been exhausted by a protracted illness, nor the condition of the lung been altered by prolonged compression, as in chronic empyema.

4th.—That if the disease (the pleuritis) be not of long standing, *i.e.*, if it be recent, the appearing of pus in thoracentesis is not, at least in scarlatinal pleurisy, a very grave indication. The majority of such cases will probably terminate favourably.

5th.—That the pus in scarlatinal empyema may perforate the lung and be expectorated, and the patient recover promptly and perfectly.

6th.—That it is not well to wait for such an occurrence, which appears to be unusual, and, as being long delayed, to involve increased danger to life, but rather to make an exploratory puncture early.

7th.—That if the pyo-thorax of scarlet fever be recent, simple puncture of the chest repeated once or oftener will usually suffice, without the employment of the drainage tube, which is so valuable and often necessary in chronic pyothorax. I may add that judging from my experience in other cases the same observation will apply to other forms of acute pyothorax.

Observations on Lithotrity and Lithotomy. By WILLIAM H. HINGSTON, M.D., L.R.C.S.E.; Surgeon to St. Patrick's Department, Hôtel Dieu.

(Read before the Canadian Medical Association, 12th September, 1872.)

Within the past few years, vesical calculi have, I believe, become somewhat frequent in our midst; and operative procedures for their removal are not of unusual occurrence. The frequency with which art is now sought should tend rather to increase than to diminish interest in the subject; to aid us in ascertaining the cause of its greater frequency, now that hygienic laws are more generally understood, and to direct attention to the best means of ridding the subjects of vesical calculi of a troublesome and dangerous malady. The first part of the subject would alone take up more time than is at your disposal: suffice it to say, urinary calculi originate in the "precipitation of urinary constituents, in consequence of a loss of solvent capacity in the waters of the urine; either (1) by an excess of any substance for the water to dissolve; or (2) by a deficiency of water for solution of the substance; or (3) by "the presence or absence of some third substance;" and, lastly, the deposit may aggregate from a focus of its own substance or may "gather around a foreign body as a distinct nucleus." Do these conditions obtain here more frequently than in other parts of the Dominion? I know not; but certain it is, cases of vesical calculi are far more common in this part of the Dominion than in either Nova Scotia or New Brunswick, on the one side, (where the disease is almost unknown) or than, so far as I can learn, in the Western portion of the country; and are more common in this city than in other cities of even this portion of the Dominion, and in certain portions of this city more than in others. While the western portions of Montreal enjoy comparative immunity from the disease, St. Mary's, St. James' and the eastern portions of St. Lawrence wards and their out-juttings, St. Jean Baptiste Village and Petite Cote, have furnished by far the greater number of cases of the disease to the hospitals. Nor is the disease met with in equal ratio amongst the British and French. I have no published statistics to aid me, but my own experience and the *parole* evidence of others, would lead me to believe that while the French Canadians are subject to certain maladies, and the British Canadians to others, among the former have been met by far the greater number of cases of urinary calculi. Dr. Robert Nelson, during his residence in Montreal, operated some sixty-five times—the greater number being French Canadians. Dr. Beaubien has had fifteen cases—all

amongst French Canadians. Dr. Campbell has operated twenty times, and fifteen per cent. were French Canadians. Dr. Munro has operated between forty five and fifty times, and he tells me his memory cannot recall among that number one who was not a French Canadian. Dr. Fenwick, who has lithotomized during the past few years in sixteen cases, and with a success that is exceedingly satisfactory, had seven among the British and nine among the French, all of them, save one, being natives of Canada. Of those lithotrized and lithotomized by myself, twenty-five per cent., in round numbers, were among the British, and seventy-five per cent. among the French. I had not the leisure afforded me of continuing this enquiry among those who have performed their one or two operations each. Thus Dr. Campbell's figures, showing a larger number of British cases, may be fairly balanced by those furnished by Dr. Fenwick and myself combined, giving a large percentage of French; while the figures of Drs. Nelson, Beaubien and Munro are without a corresponding counterpoise from among the British. Whatever may be the influences which combine to render urinary calculi of greater frequency among the residents of this Province than of the other, and in this Province among our fellow-citizens of French origin, I cannot even conjecture. Differences in the soil, water, &c., and in other climatal conditions might be evoked in explanation of the former; but the latter must be left to speculation. So much, gentlemen, for the formation of stone, and its frequency; and now for its removal. And here I confess to some diffidence in hazarding an opinion where it might seem fitter for me to ask it. Yet an opinion must be formed, and operations must be resorted to, and it is oftentimes difficult for a surgeon, not wedded to either, to say which operation—lithotrity or lithotomy—is best suited to the case. I had performed lithotomy five times,* and each time with success, ere I performed my first operation of lithotrity; but since then I have performed lithotomy but three times, choosing, rather the lithotrite in every case where its employment was not clearly contra-indicated. The experience I have thus gained, limited, it is true, is this: that in the adult, hardness, and hardness alone, should offer an obstacle to the use of the lithotrite: and that neither the size nor the number of the stones, nor even the condition of the urinary organs, should be permitted to be obstacles to the performance of lithotrity, should that operation be preferred to its more brilliant, more rapid, and withal more dangerous competitor—lithotomy.

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* November 14th.—An operation to-day (Lithotomy) on a congenital case in a child of five years increases that number.

It is to be regretted that statistics do not represent the true state of the question, so far as a general comparison between the two operations is concerned: and for these reasons. For lithotomy to be successful it is supposed to be necessary that the stone be of moderate size, single, and not too hard: and that the urinary organs be in a healthy state. I say *supposed* to be necessary, for in some of the cases I met with the stone was large; in some cases multiple; and in more than one case the organs were in a far from healthy condition. If, however, we admit statistics as they are furnished to us by those who practise both operations, lithotrity is one of the most satisfactory. Civiale, whom I have seen operate many times, and whose dexterity and delicacy in handling his instrument I have much admired, says that out of 591 operations there were only 14 deaths, or one in 42.2. This was in his own practice; while lithotomy, until recently, gave 1 in 7.9. The statistics furnished by Great Britain are meagre. Twenty five years ago cases were frequently sent thence to the great lithotritist of Paris; but Brodie, Ferguson, Keith and Thompson soon came to retain in Great Britain cases that would otherwise have been sent to France. Brodie lost 9 out of 115, and of these only 5 were due to the operation. Ferguson lost 12 out of 109 cases, and Keith 7 out of 129. Sir Henry Thompson's earlier returns were 84 cases and 4 fatal. His later returns, 184 cases, and recoveries 93 per cent. And, omitting five deaths from other causes, the mortality amounted to only 4 per cent. "I now may say," says Sir H. Thompson, "that the deaths which occurred from all causes during or after the conclusion of treatment, among 204 cases of patients, averaging 61 years of age, were 13 in number, constituting a rate of recovery of 93½ per cent." Mr. Crichton in 122 cases had only 8 deaths, or less than 1 in 15. "Considering," says a writer, "the relative mortality of the two operations, so highly in favour of lithotrity, the small proportion of cases submitted to this operation would scarcely seem judicious." But a more recent writer, Sir H. Thompson himself, says: "Although the proportion crushed now, I believe, by most surgeons, is mostly larger than that submitted to the knife, I have ventured to regard lithotrity, as a rule, applying it to five out of every six adult cases; and to employ lithotomy only as the exception." Gentlemen, I must be pardoned if I append my puny figures to those just read to you. I require three to make a score of cases of lithotomy and lithotrity combined—eight of the former and nine of the latter. But as in one of the cases of lithotomy I had previously lithotrotized the patient; and as in one of the cases of lithotrity the patient had been previously lithotomized by me: although this does not diminish the number

of cases it does the number of patients, who were thereby reduced by two. Of the eight cases of lithotomy I have little to say. They presented no special features of interest – five of them were children. The lateral operation was performed in all but one case—when Allarton's method was followed. They all terminated favourably. One, however, a boy, operated upon four years ago, from whom I removed a stone weighing three drachms 49 grains, still suffers, and probably ever will suffer from incontinence of urine. The number of calculi in each case was one, with one exception. From one patient lithotomized I removed twenty-five calculi; yet within six months I lithotritized him, new calculi having formed in the interval. Of the nine cases of lithotrity six recovered perfectly, and without a return of the disease; one was operated upon the second and last time more than a year ago; and of the two incompleted cases one, undertaken at a critical period, was abandoned; and one was partially crushed by the lithotrite, but a sacculated bladder rendered recourse to lithotomy necessary. In no case where the lithotrite was used was the bladder injured, and (the same has been observed by others) even when the irritability was considerable before the operation, that irritability was lessened before any *debris* had passed away. Of the average number of sittings in each case I have no record. The greatest number, however, in any case, so far as my memory serves, was sixteen, and the fewest number was three times.

Surgical writers are accustomed to lay down certain rules for the guidance of lithotritists which appear to me to be somewhat faulty, and to some of which I shall allude:

1st. As to the use of chloroform. Chloroform should generally be administered. It was given in all but one case, the nervous, restless condition of the patient, and the frequently irritable condition of the bladder, rendering it necessary.

2nd. It is recommended to empty the bladder and then to inject with tepid water until that viscus contain five to six ounces of fluid. That advice I regard as most pernicious, as the injection of warm water is really more painful, and may be more dangerous, by inducing spasm of the bladder, than the introduction of the lithotrite itself; and every surgeon knows the difficulty of retaining fluid thus introduced.

3rd. It is recommended not to lithotritize unless the patient can retain his urine at least four hours. Although it is highly desirable, as an evidence of absence of irritability of the bladder, that the patient should be able to retain his urine a considerable period, in one of my most satisfactory cases the urine could not be

retained as many minutes, but came trickling away in a gutta-percha bag suspended to receive it.

4th. As to the difficulty of sometimes finding the stone all litbotomists are agreed. The same difficulty occasionally presents itself in attempting to seize it. The instrument used in my few cases was the French one, introduced on the patient's right side, (patient on his back,) the instrument held perpendicularly when passing through the membranous portion of the urethra, the weight of the instrument alone propelling it. The blades were not opened till the centre of the bladder was reached, and, as recommended by Civiale, no depression was made, and the stone was not made to fall into the lithotrite, as taught by Brodie, Heurteloup and Crampton, but seized where it was found, and generally without the blades of the instrument touching the coats of the bladder, much less injuring them.

In only one case did the patient complain of suffering after the effects of the chloroform had passed away. One of my patients, a shoemaker, was so little inconvenienced by the operation that he rarely lost any of his working hours, but went cheerfully to sleep a few moments after twelve, singing the "Marseillaise," awaking suddenly to consciousness, and in time to return to the city and resume his work at one. This patient was lithotritized fifteen times altogether—eleven times on first, and four times on second occasion—when calculi had reformed after an interval of several months; yet he more than once declared in the presence of the students "je ne sentais rien." He had several large-sized calculi—the larger *debris* of which alone nearly filled a two-ounce cerate box.

Seeing the facility with which the calculi were broken up in the few cases submitted to the action of the lithotrite, and the inconsiderable discomfort attending and following the operation, I am of opinion that, in the adult:

1st. When the stone is small, we should crush.

2nd. When however large, if friable, crush.

3rd. When single, crush.

4th. When multiple, crush.

5th. When hard and large, whether single or multiple, we should cut.

6th. But in all cases of children, whatever may be the size, or number, or consistence of the calculi, we should lithotomize.

Corner of Union Avenue and St. Catherine St.,
Montreal, September, 1872.

N.B.—While this short, imperfect sketch, written chiefly for the purpose of adding a little to the interest of the Montreal meeting

of the Canadian Medical Association, is passing through the press, I am perusing, for the first time, Sir Henry Thompson's admirable work, "Practical Lithotomy and Lithotrity." Although many of Sir Henry's observations are embodied in Holmes, Gant, Erichsen, and other works of systematic surgery, the comprehensive and exhaustive nature of his monograph can only be appreciated on perusal. While much of what I have written is fully and ably treated by Sir Henry, I am not a little pleased that many of the impressions conveyed to my mind by the observation of a few cases on this side of the Atlantic, are the echoes of more powerful impressions on the earnest mind of the most accomplished living lithotritist, by the treatment of cases more than twelve times the number.

Aneurism of the Thoracic Aorta, Commencing below the Giving-off of the Left Subclavian Artery. By GEORGE ROSS, A.M., M.D., Professor of Clinical Medicine McGill University, Attending Physician to the Montreal General Hospital.

(Read before the Medico-Chirurgical Society of Montreal.)

I think the following case of sufficient interest to present to the society as affording an example of this dangerous and suddenly fatal disease, occurring with hardly any symptoms which might warrant its positive diagnosis during life.

M. M., aged 37 years, first consulted me on the 2nd of July last. He was a tall, well-built man, of tolerably robust frame, but with hair nearly white, which, of course, is unusual at his time of life. He had always enjoyed good health until last spring, when his present illness began; he had, however, during some years previously, been of very intemperate habits. He had never had syphilis. He complained of severe pain in the left side, and had, he told me, been treated for a length of time, in the country where he resided, for pleurisy. The pain, he said, had commenced about three months since; had been getting gradually worse, and he had never been since entirely free from it. The suffering was referred *particularly* to two points—one about the middle of the left interscapular region, and the other in the very centre of the left lateral region; but it also radiated from these points over the whole side, and sometimes up as far as the shoulder. It was described as of a *burning* character generally, but sometimes *lancinating*—increasing, at irregular intervals, to great intensity, preventing sleep, and involving great physical torture. As a general thing, the pain was increased towards night, and he felt better in the morning. He had a poor appetite, and had been

failing considerably of late in general health. His tongue was heavily coated with a creamy fur, and the bowels rather costive. Pulse, 100; regular, and of fair volume. On examining the chest I found that the two sides expanded equally, and he could easily bear to take a full inspiration, although he said that some time previously he had had considerable *stitch* on attempting to do so. The resonance of the chest walls was clear and normal throughout. The respiratory murmur was distinct over the whole of the left lung, as well as the right, and was unaltered in any respect. The heart sounds - which I particularly attended to, as he mentioned having felt some uneasiness, at one time, "about his heart"—were perfectly natural; no murmur was to be heard either in front or behind. On examining, now, the points to which he himself had referred the most intense of his sufferings, I found that a small surface at each spot was very distinctly tender; pressure at once caused him to wince, and even a very light touch was clearly sufficient to give pain. Tenderness was also experienced, but to a less degree, along the fourth and fifth intercostal spaces. Striking on the vest, vertebræ forcibly, produced no pain whatever. The diagnosis now arrived at was that of "Intercostal Neuralgia"—the superficial character of the pain, its burning nature, and its occurrence in irregular paroxysms, its exact location in the course of two intercostal nerves, and the existence of tender spots, all pointing towards this view of the case. With regard to the cause of the neuralgia it occurred to me that the most probable explanation was to be found in the existence of some of those *nutritive* changes in the trunks of the nerves, which are believed to be frequently the cause of various forms of neuralgia, and the evidences of premature senility to which I have already alluded rather favored the adoption of this hypothesis. Acting under the belief of the purely neuralgic character of the disease I ordered him an alterative powder containing rhubarb, soda, and grey powder, to be taken every morning for a few days, and at the same time quinine, gr. j., in solution, three times a day, and a draught of solution of morphia at bedtime. (I should have preferred the hypodermic employment of the opiate, but the distance of his residence was sufficiently great to preclude this.) Three days subsequently he was given, in addition to this, a liniment of chloroform, tinc. aconit, and soap liniment, to be applied locally thrice daily. This, in main, constituted his treatment during the present attack, with the exception of the administration of the muriate of ammonia instead of the quinine during a portion of the time, and the application of two or three small fly-blisters over the painful and tender points. Not to trouble you with any more

detailed description of the case, suffice it to say that after the lapse of six weeks he was very materially improved in every respect. His tongue was clean; his appetite good; his pain almost gone, (only an occasional twinge left); and he rested well at night. I now put him upon cod liver oil, omitting all other treatment, and sent him to stay with a friend near the city, to feed well and rest. Two weeks after he called upon me to say that he felt "like a new man," and was going home to work. Did not see him again till the 3d September, on which day he was, at his own request, admitted into the Montreal General Hospital under my care. I found that he had remained well for about two weeks after his return home, but the pain had now returned again in the same place, in consequence, he believed, of having exerted himself in endeavoring to do some farm work. I need not describe his condition at this time, as it would consist of a mere recapitulation of that first given. His chest was again examined with the same negative result, and the same diagnosis was confirmed. During his stay in the hospital no new symptoms were developed, except that two or three days previous to his death he complained of slight pain on the *right* side of the chest. He was treated by means of morphia administered hypodermically, sedative liniment, and cod liver oil. Again he improved, and the day before his death expressed himself as feeling decidedly better. On the morning of the 15th October, a few moments after he had been cheerfully conversing with the other patients, those around noticed him become remarkably pale, and he was found to have suddenly expired. Now, aneurism was more than suspected, and this idea the autopsy fully confirmed.

For the following notes of the post-mortem examination I am indebted to Dr. Roddick, House Surgeon, and much regret that owing to circumstances connected with objections on the part of the man's friends it had to be made in a very hurried manner, and I had not an opportunity of attending at it myself.

AUTOPSY.

On removing the sternum a thin clot of blood, or, rather, the thin edge of a clot, was exposed, extending half way across the pericardium. Passing the hand round to the left side and back, I came on an immense clot of blood, larger than the normal liver, and very firm. The pericardium contained about four ounces of limpid serum. The heart was considerably displaced to the right side, with the left ventricle firmly contracted. On attempting to remove the thoracic viscera entire, it was found impossible so to do, by reason of a tumour which was strongly adherent to the

third, fourth, and fifth dorsal vertebræ. I then cut away a large portion of the lungs from the central mass, and with very great difficulty succeeded in separating the latter from its attachment to the backbone. The anterior surfaces of the vertebræ mentioned were extensively eroded, the portions of the bodies remaining being rough and irregular. The mass removed consisted of the heart, great vessels, a portion of each lung, and an aneurismal tumour, involving a part of the left lung, and containing a firm laminated clot of the size of a goose's egg. In the thoracic portion of the aorta, at its commencement, just beyond the giving off of the left subclavian artery, were found two openings with everted edges, one about the size of a quarter dollar, and the other of a ten-cent piece. The edges of both were smooth, even, and fairly everted. The largest opening, which is also that nearest the heart, lay over the ulcerated portion of the spine, looking backwards and to the right, whilst the latter, the smaller, communicated with the space before referred to as containing the clot, and which is situated in the structure of the left lung. The lung tissue in the neighbourhood was condensed, and the bronchial glands were much hypertrophied. On the internal surface of the aorta were several bony plates extending almost continuously along its floor for about two inches. One segment of the aortic sigmoid valves presented a small bony growth, and was somewhat puckered, preventing entire closure of the orifice. The mitral valve was somewhat, but not markedly thickened. The other valves were healthy. The other viscera examined were apparently normal.

There are a few points connected with this case upon which I would like to say a few words. *First*, The absence of all symptoms generally referable to intra-thoracic pressure—this, I think, is satisfactorily accounted for by the *situation* of the tumour—being placed *beyond* the point of contact of the left recurrent nerve, this latter escaped pressure, and we had no laryngeal symptoms. In like manner, the trachea, œsophagus, sympathetic nerve, and bronchi were left uncompressed, and the signs which would necessarily have resulted from interference with any of these were wanting. *Secondly*, The fact that alteration of posture did not produce any alterative in the existent pain—a sign so valuable in assisting the diagnosis of an obscure case of aneurism. It seems to me that the aneurism in this case being a *false* aneurism—the sac consisting of areolar tissue surrounding the aorta—it would not be as freely *moveable* as if it had been a true aneurism, contained within the attenuated coats of the vessel itself, for then the aneurism would have had the capability of moving with the aorta during changes of posture, which movements would necessarily

depend for their freedom upon the looseness of the investing cellular tissue, but in the pre ent case, there being no such condition of things, the tumour could not alter its position by means of gravitation to any extent, by reason of the firmer manner in which it was bound down, and therefore the decubitus in no way affected the pressure upon the origins of the intercostal nerves. *Thirdly*, The occurrence of a distinct interval of between two and three weeks, during which the patient was almost entirely (sometimes entirely) free from pain. The degree of pressure must have remained the same throughout: for we cannot suppose that the size of the tumour at all diminished. Why, then, did the pain gradually lessen until it finally disappeared, only to begin again after a considerable interval of time? This, I think, is a circum stance which is extremely apt to mislead, and certainly tended materially to induce me to form an incorrect opinion as to the *cause* of the evident neuralgia. The result of a treatment adopted with a certain view having proved successful, was, I considered, good ground for sustaining the truth of that view. But here this mode of arguing was found eminently fallacious, and only affords another instance of how a *persistent* cause *may* produce an *intermittent* neuralgia. Dr. Anstie, one of the best authorities upon nervous disorders, says: "When the pain is the result of direct injury to a nerve-trunk, whether by external violence, by the mechanical pressure of a tumour, or by the involvement of a nerve in inflammatory or ulcerative processes spreading to it from surrounding tissues, the important matters are that the pain in these cases commences comparatively gradually, that the intermissions are much less complete, and that the pain is far less amenable to relief from remedies than in other varieties of neuralgia." Now, here, though arising from a truly mechanical cause, the intermission seemed very complete, and the disease appeared quite as amenable to treatment as in most severe attacks. Concerning this *intermittency* of neuralgia I may, perhaps, be permitted to quote the following words from Niemeyer, premising that the *intervals* to which he alludes mean the short spaces existing between accessions of pain, not a complete portion of time between attacks, as here pertained. He says: "As we are almost compelled to believe that the irritation acting on a nerve which causes neuralgia, acts continuously, the intervals between the pains appear enigmatical: for their explanation we must refer to the physiological fact that the severe irritation of a nerve exhausts the excitability for a time, then in neuralgia states of *great excitement* would alternate with states of diminished excitability."

The occurrence of this fatal case, with the symptoms I have

related, has forcibly reminded me of the similar one of *abdominal* aneurism lately reported to this society by Dr. Colin Sewell, especially as there are these strong points of resemblance between the two. Both suffered from severe neuralgia, and both enjoyed perfectly (so to speak) *lucid* intervals. In both the apparent improvement was (incorrectly) attributed, in a great measure, to the treatment followed. In neither was aneurism positively diagnosticated until after sudden death, although in Dr. Sewell's patient (who had been seen in consultation by Dr. Campbell and Dr. Howard) it had been suspected but could not be discovered.

The author already quoted from states that "Intercostal Neuralgia is among the most frequent forms of neuralgia," and Aitken ranks this form as next in frequency to neuralgia of the trifacial, the commonest of all; and as its connection with aneurism renders its frequency and severity a matter of great interest, I should like to ask the older members of the society what their experience has been on these points; and further, whether there are any known clinical facts which will enable us, with any degree of certainty, to diagnose the pain of aneurism of the aorta from simple intercostal neuralgia, in such cases as the one I have described.

Observations on Dr. Pratt's Essay on the Origin of Fever, read before the Surgical Society of Ireland—Typhoid Fever as Observed in West Rutland, Vt., in 1870. By OCTAVIUS H. E. CLARKE, M.D., C.M., Cohoes, N. Y.

Most of your readers have, no doubt, seen, in "Brathwaite's Retrospect" or elsewhere, Dr. Pratt's paper on the "Origin of Fever," read before the Surgical Society of Ireland, and the comments thereon by Dr. Edmund P. Sharkey.

The point at issue, whether typhoid or any other fever is caused, or materially fostered by filthy habits, is one of the utmost importance, as the negation of this fact—if fact it be—by the profession would lead to incalculable mischief, by withdrawing the greatest incentive to sanitary reform.

In the autumn of 1870 I attended in West Rutland, Vt., and its vicinity, sixty-one cases of fever I would pronounce, undoubtedly, "typhoid" or "enteric," and thirty-seven cases which were uncertain in diagnosis. The other physicians in the place had, likewise, their hands full. The circumstances under which the disease occurred may be of some interest in connection with the question under consideration.

West Rutland is the site of large marble quarries. It is built at the intersection of two narrow valleys, bounded by high hills or mountains, and very imperfectly drained. Every spring and autumn the lowest part of the valley is flooded, and at that season some of the houses are surrounded by water. This part of the village is known as "the swamp." The marble is found in the slopes of the hills on the east side of the valley, and here, around the quarries, dwell the great part of the laboring population, in tenement houses, some on the level of the swamp, others about twenty-five feet above it, and yet others much higher, on the species of table land which is bounded by hills. On the west side is the old village of West Rutland, where the more fortunate dwell in isolated houses surrounded by gardens; and more north, also, on the west side of the valley, opposite the quarries, are some long tenement houses for quarrymen.

The houses in which the "hands" live are generally small, very close together, and the inmates, representing many nations, are not always distinguished for cleanliness. Two localities, "Baxter's Yard" and "Parker's Patch," must receive special notice. "Baxter's Yard" covers about two acres of ground, and has three rows of tenement houses. One building alone, in the central row, contained--according to a local paper--one hundred and ninety-two persons, of nine different nationalities, and the population of the whole "yard" could not be less than four hundred. At the northwest angle of the yard, only a few feet from the houses, was an old quarry, no longer worked, full of a green, fœtid water, and into which was generally cast the offal of the yard. The yard is backed by a steep hill about sixty feet high. "Parker's Patch" will be described hereafter. It was not overcrowded, but rejoiced in the possession of an "old quarry."

The summer of 1870 was remarkable for want of rain. The "swamp" dried up more than it had done for many years, and all the streams, ponds, &c., experienced the same desiccation. In consequence of this the water in the old quarries evaporated considerably, and what remained became a concentrated *fluid extract* of their contents. The drinking water, often obtained from some pond near by, was offensive and turbid, which, I remember, was especially the case with the water used in one of the localities most afflicted with typhoid fever.

In June, when I arrived at Rutland, scarlet fever was prevalent in West Rutland, and was specially rife among the habitations on the top of the first row of hills or tableland before mentioned, in which situation it was considerably more fatal than in the valley. I do not pretend to explain the fact, but so it was. Later in the

summer "cholera morbus" was extremely common. The first cases occurred on the "swamp," and later, "Baxter's Yard" eclipsed all the neighborhood in the number and severity of its cases. The first case of typhoid fever I saw, and, I believe, the first that occurred in the locality, was that of a young man living in "Baxter's Yard," who had received a blow on the mouth from part of a machine. His lips were badly cut, and I applied sutures, &c. Th y began to unite kindly, but on the third day he had a rigor, followed by a headache and fever which, for the first days, was remittent, but gradually developed into undoubted typhoid fever. The windows of the house he inhabited opened towards the old quarry, which was only some twenty-five feet distant. In the next house boarded a friend of his who attended him at night. This young man was the next victim, but had not a very severe attack. Of the inmates of the house, three had incipient symptoms of the disease. In another house in this yard, about one hundred feet from the old quarry, lived a Swede who, while at work, received a heavy blow in the loins from a stone thrown by a rival workman. The unfortunate Swede had a severe attack of congestion of the kidneys for which leeches were applied. While apparently convalescent from the results of this accident, typhoid fever supervened, and his was a very severe case, during the height of which his wife was attacked suddenly and with great violence. Typhoid fever now became so prevalent throughout the "yard" that almost every fourth door had its case or cases, and in several places five or six contiguous houses were occupied by the disease at the same time. In my own practice three houses had four cases each, five houses three cases, and six houses two cases. The disease continued in this yard throughout the autumn and beginning of winter, and in January I was attending a severe case in "Baxter's Yard," the fourth in the same family within the last few months. About the same time that typhoid fever appeared in "Baxter's Yard" (August 25th) it showed itself at "Parker's Patch" in a very severe form, and many persons had the disease. The inhabitants of the hills or tableland had much less fever. It commenced with them much later in the season, and prevailed during a shorter period. Although considerably above the "old quarries" they were not more than three acres distant, and the hills behind seemed as an impediment to the rapid dissipation of the effluvium when the wind blew over the old quarries towards the houses. The inhabitants worked all day in quarries beside the "old" ones, and were in constant communication with the denizens of the infected localities; yet, with all these disadvantages, and with considerable crowding in their own buildings, a little ele-

vation and three acres distance appeared to be the cause of a great reduction in the prevalence of the disease.

Dr. Pratt expresses as his opinion that such hygienic circumstances as existed in West Rutland have no influence on the prevalence of fever, and after giving a graphic account of the Irish farm-house, with its heaps of corrupting offal around it, and the pigs and fowls visiting within, asks why the inhabitants so often escape fever.

Dr. Sharkey partly explains this apparent anomaly by saying the Irish houses "are generally built with 'hall doors' through which the wind freely plays, and when it blows strongly in front the front one is closed, and when at the back the back door." To this I may add that farm houses being isolated dwellings, the noxious effluvia are constantly diluted by pure air, which is the universally admitted manner by which they are rendered innocuous. But should they be confined, either by hills or rows of buildings, then it would appear that their deleterious effects are experienced, as in the case related by Dr. Skarkey, and in "Baxter's Yard" and "Parker's Patch."

Dr. Darby, of the Surgical Society, denied any fever-producing power to the emanations of decomposing manure heaps, while admitting that overcrowding "would account for the spread of disease from human being to human being."

Of the localities in West Rutland famous for fever, "Baxter's Yard" combined both decomposing organic matter and overcrowding. At "Parker's Patch," where the fever was very prevalent and very violent, there was no overcrowding; but, the old quarry, full of fœtid water, was just below the houses, built in three rows on the slope of the hill which rises above them. To the south is a high embankment of refuse marble and earth dumped out of the quarries; while to the north the hill gradually encroaches on the valley so that the only direction from which the wind can blow to any extent is just over the old quarry, carrying its emanations directly into the houses. While this part of West Rutland was suffering so much from typhoid fever, the long row of tenement houses at the foot of the mountain, directly on the opposite side of the valley, had not a single case throughout the season. There was plenty of uncleanliness and some crowding there, but, no old quarries, and the spot which is near the junction of two valleys, was proverbial with us doctors as the coldest and most windy in the neighborhood. All the effluvium was consequently diluted and carried off as fast as generated. At the same time what I have named the old village had, I believe, but two cases of fever, neither very serious. It is proper to add

that during this season typhoid fever was more or less prevalent in the surrounding villages which had no quarries and their concomitant evils. But villages situated in that part of Vermont are mostly situated in valleys like that of West Rutland, generally swampy, and which, from the dryness of the season, undoubtedly offered much dead organic matter to the decomposing action of the atmosphere. No other place, to my knowledge, equalled West Rutland in the prevalence of fever. A close investigation of circumstances might have furnished an explanation of its cause as well as in that locality.

These facts made on me a strong impression in favor of Murchison's "Pythogenic" theory, which, I must say, is not effaced by Dr. Pratt's essay. That "the wind bloweth where it listeth" is very true, but nothing therein shows that we cannot discover *why* it should blow in certain directions, which has already been done to some extent. The proposition of Dr. Stokes that God is the cause of all great phenomena is likewise indisputable, but that is no argument against the possibility of man's ascertaining the means by which He has chosen to bring about those phenomena, and of our modifying such causes to our own advantage. Are not the actions of opium great phenomena due to the Divine Economist; but has not man been able to investigate and analyse them, until he has found exactly upon which principle in the drug certain effects depend, and has even turned this knowledge to advantage in the cure of disease? If one class of natural phenomena can be thus brought within the jurisdiction of human knowledge, why not the other?

The following case, while illustrating the special danger of contracting fever in "Baxter's Yard," is also interesting as being possibly due to contagion, and as bearing upon the duration of the stage of "incubation" in enteric fever, a matter which is at present attracting some attention:

Case I.— Wood, æt 18, a delicate, hump-backed girl, lived in a farm-house about three miles from West Rutland. Although never robust, she enjoyed continuous good health, and was of a cheerful and active disposition. She paid a visit to her sister, in "Baxter's Yard," and when there went to see a friend ill with typhoid fever. The next day she returned home, but in the afternoon of the *fourth* day was taken with a chill, followed by headache and pyrexia, and a severe attack of typhoid fever ensued. I saw the case in the second week for the first time. The patient was delirious almost all day, with some very short intervals of consciousness, but during the night was continually raving. Pulse 145, very weak and small; respiration 38; physical signs of

engorgement of both lungs, it being greater in the left one; abdomen distended with flatus; pain quite decided in right iliac fossa; gurgling, diarrhœa and rose-coloured spots; countenance cyanotic from venous congestion; eyes suffused.

Ordered sinapisms to chest, followed by large linseed meal poultices, sprinkled with mustard, which were afterward changed for turpentine stupes; carbonate of ammonia, brandy, diaphoretics and dieuretics, and muriatic acid, suitably diluted and sweetened, as a beverage; strong beef-tea and milk to be given as often as possible. in the condition of the patient. The following powders were given to check the diarrhœa; they have always done me good service in such cases: ℞ Acidi Tannici, Pulvis Kino Comp. (Br. Pharm.), Hydrarg *c* Creta, aa, grs. xxiv, Pulv. Doveri, ʒj. M ft. pulv. xii. S. One powder to be given every four, three, or two hours till diarrhœa is checked, then powders to be discontinued and administered again should more than three actions of the bowels occur in twenty-four hours.

Under this treatment the patient improved for a few days, and became quiet and rational during daytime, but ultimately the poor girl sank, apparently from failure of vital force, and died towards the end of the third week. No post-mortem examination was allowed.

Case II.—A young man, a farmer, living three miles off, came to West Rutland and slept in a house at "Parker's Patch." There was a case of enteric fever in the tenement below his apartment. The next morning he had a severe rigor, followed by typhoid pneumonia, or pneumonia with enteric fever. There were the distinctive symptoms of enteric fever, such as diarrhœa, pain and gurgling in right iliac fossa, delirium for many nights, length of case, &c. There were no rose spots, but they, in this season, were often wanting in the most characteristic cases. The patient had been exposed to cold, and his case may be considered one of typhoid fever supervening in the course of pneumonitis.

Remarks on a Curious Inquest. By Zotique Hebert, M.D., C.M., Whitehall, N. Y.

On the 3rd of September last, Mrs. H. E. Sargeant, a woman of Whitehall, was dying suddenly. I, a neighboring physician, was called to attend her, but finding her in a state beyond the reach of medical aid I ordered no remedy but a little brandy and water, with topical applications to warm her up. These attempts were fruitless, and she died within ten or fifteen minutes after I was called.

As the husband was said to be in the habit of abusing her, the question arose as to whether the woman had been poisoned or died from natural causes, and Mr. Sargeant was arrested and charged with supposed murder. The coroner summoned a jury and it was agreed that a post-mortem examination would be necessary to ascertain if poisoning existed or not. Dr. H. K. Bennett, homœopathic practitioner of the same village, was called to perform the autopsy, and was assisted by another physician of the place.

The report, although a long one, may be summed up as follows: No external violence; heart weak and small; liver enlarged; the stomach was removed, tied up, but the contents not examined; the small intestines and omentum were congested or inflamed, her general appearance indicated anœmia and debility. The medical men feeling satisfied, as they said, that no poisoning existed, judging from such an examination the causes of death were alleged by them to be: First, poor blood; second, some water found around the heart; third, some water also found in the ventricles of the brain; fourth, a sudden emotion, joy or grief, &c.

The editor of the *Times*, of Whitehall, anxious of filling his columns with some interesting facts, shouted out at the innocence of the husband, arguing that every citizen in the place elicited the warmest sympathy towards Mr. Sargeant. This is quite a peculiar way of judging of facts, and the fate of criminals would be very different if sympathy should be called in witness; but this individual sympathy never influences the judgment of a court of justice, at least it should not; but where the *Times* shows more ignorance of the fact is when it comes to answer an article published in the *News;* for want of argument he repeats what he had said before. If one should let physicians argue on medical subjects, lawyers speak on legal matters, and journalists report facts, decisions and judgments would be founded on science and reason and not on sympathy of the public.

APPRECIATION OF THE MEDICAL REPORT.

As to the first cause given, it may be said that poor blood is not a disease, but a result of one which should have been looked for. If one should consider poor blood or debility to be an affection, we would have to classify the greatest part of the diseases of our nomenclature under that head, especially the chronic diseases, which generally debilitate the system, also the fevers, &c. According to that principle, consumption, scrofula, syphilis, cancer, typhus and typhoid fevers, small-pox, &c., &c., should all be ranked in the category of debility.

The second mentioned cause was water around the heart. Now,

hydropericardium, or water around the heart, is not a disease, but a symptom of pericarditis or obstruction of the cardiac veins. It may also originate from an impoverished state of the blood and from a weak and languid circulation. Pericarditis and venous obstruction were not said to be present, therefore let us put them aside and dwell upon the two last causes. It is known that if the blood becomes poor it does so in the system at large, and so also when the circulation becomes altered. Now, when due to these causes, dropsy is more apt to take place in the parts where the circulation is most tranquil; therefore it will first show itself at the parts furthest removed from the influence of the heart's action, and where the force of gravity in the common position of the body is greatest; hence it will generally begin in the form of œdema about the feet and ankles, and not around the heart, where the action of the latter is more powerful, and no more so at the brain, where the blood has a tendency to gravitate towards the heart; and there was no œdema of the feet and ankles to attract the attention of the examiners in this case, nor any effusion in the peritoneum, where it would have been more apt to show itself.

The same may be said of the third cause, for no disease was found to exist in the brain. In the acute form of hydrocephalus, or water in the brain, the meninges would have suffered inflammation, the brain substance would have been found softened, and more or less tuberculous matter would have existed; but it was not the case, for the medical expert, Dr. H. K. Bennett, found it healthy. The chronic form of this disease would also have produced its characteristic symptoms and lesions.

In regard to the fourth cause, it is well enough to state that sudden emotion, joy or grief, may produce sudden death, but instances are rare enough, and cases of sudden emotion, joy or grief, &c., happen every day without producing death or even sickness, and when this is alleged as the cause of death it should be at least probable, and the conclusion should be drawn only in case we are convinced that no other perceptible causes exist, and after we have sought for them. Otherwise, if no further investigations are made, we might be led to infer that this is the cause of death in many cases of suicide and homicide, because hardly any happen but that the victim has a violent emotion. Moreover, the woman is not known to have had any great emotion the morning of her death, none to be compared, at least, to one she had some days before, and which would have been *rather slow*, if it should be the one referred to.

About the question of poisoning, I wondered much at the superior skill of Dr. Bennett in his statement. His process of arriving

at a satisfactory conclusion is most novel and unique in its nature. He finds the veins of the brain gorged with blood, an unusual amount of water in the ventricles of the brain, an inflammation of the intestines. He can discover no disease to account for those pathological conditions, and feels satisfied that no poison has produced death. What, then, could have produced these symptoms? Is it a sudden emotion? It is more than doubtful. Poisoning by aconite may produce symptoms very identical with those observed in the deceased, and so would many other substances, such as belladonna, stramonium, opium, hyosciamus, conium, lobelia, digitalis, or their active principle, aconitia, atropia, daturia, morphia, hyosciamia, conia, lobelina, digitalin, also hydrocyanic acid, potassium cyanide, oil of bitter almonds, &c., &c. Any of these substances may produce a venous congestion of the brain, sometimes irritation of the alimentary canal, and some of them effusion into the ventricles of the brain. Now, was not I right to say that Dr. Bennett is possessed of superior skill to tell at once, and without further investigation than by the naked eye, and no chemical analysis, the difference between the symptoms found in this case and those produced by the substances above-mentioned, when no disease was found to have produced them, and in conclusion says he feels satisfied that she was not poisoned. Indeed, such an opinion should have been *intuitive*, and above the reach of the skill and science of the present time.

By the way I talk one might be tempted to suppose that I consider the case one of poisoning, I don't say I do at all, but the parties that made the post-mortem examination seemed to do so, and looked for evidence, although in a very peculiar manner. Now, I should like to know what Dr. Bennett wanted to do with the stomach, if he did not examine its contents, nor have anybody to do it, in the case he could not do it himself. Nevertheless, he concludes that no poisoning exists, and the man is released before any investigation for poison is made; because chemical analysis of the different parts of the body and the contents of the stomach is the most important research in looking for evidence of poisoning, when no disease is found to account for the symptoms and lesions present; and, I may repeat, sudden emotion, &c., was not sufficient to account for the morbid condition of the body. What was the object in ironing and locking up that man, if the procedures that would tend to elucidate the fact are neglected and the man restored to liberty? I don't mean to say the man is guilty; far from it; but he has been badly used, and there was no seeming reason for taking him up, if no further investigation was intended to be made.

Now I would explain myself on this point, for I do not like to be censured by persons who do not understand me. If I have been urging the absolute necessity of a chemical analysis it is because Dr. Bennett found no other disease than a sudden emotion acting on a debilitated system; but as there was one, or at least one to be looked for, this necessity of chemical researches becomes greatly lessened until we have sought for that disease and satisfied our mind as to its being present or not, although it would in any case be useful to confirm a diagnosis made without it, as the presence of disease would not necessarily prove the absence of poisoning. There is no physician who can swear there is no poison in a dead body, if no chemical analysis is made, although he may know what disease has produced death: but it may be inferred that no poisoning exists when no suspicion is excited, if some palpable cause of death is found or discovered. We never look for poison in the stomach of a person who died after receiving a shot through the heart, or a shock of lightning, or again, some injury of the brain, although it is not impossible that poison might have been taken before. It is true enough that disease and poisoning may be present in the same individual, but this is not a reason for opening all dead bodies under the suspicion that poisoning may exist. Counsellor Hill is not to be blamed for his attempts to maintain the law, but means of a more delicate kind should be adopted, and it seems to me that a consultation of the attending physician could be of no harm in the case; and then, if some doubt had been entertained regarding the cause of death, make the necessary investigations.

In my opinion the investigations should have been guided, first, by the state of health of the woman before her death; but this seems to have been completely overlooked or unappreciated, only it was spoken of debility, but how and why this came on don't seem to have troubled the mind of any. That Dr. Bennett's opinion has been corroborated by another physician don't prove his statement to be any more correct. The health of that woman had been gradually failing for the last three years; her appearance was pale and flabby, and indicated a loss of tone; she had a feeling of nervous exhaustion; a pain about the prœcordial region, accompanied with a sensation of suffocation and a fearful sense of impending death; she was subject to transient attacks of faintness, dizziness and headache, and at last to dyspnœa, excited even by moderate exertion; moreover, a woman of six years marriage, menstruating and without family, together with the preceding symptoms and no exhausting disease accounting for her decline, and resisting all remedies, tonics, alteratives, &c.: all these, I say,

should have instantly led a scientific physician to go to the heart and examine it thoroughly, and he should have expected to find something else than *a little water about it.* He should have expected, I say, to find a structural change, and this fatty degeneration of the muscular fibres of the heart. Moreover, the post-mortem examination, so far as it has been conducted, tends to corroborate the fact. The heart was small in size and its muscles weak. (this could not have been produced by acute poisoning); its cavities were full of blood, showing its walls too weak to propel its contents; no doubt it was pale, and so should have been the other organs of the body, and it is probable that the liver, also, was undergoing fatty degeneration, as it was found enlarged, such as it might be in the first stage of that disease; but although we may feel satisfied and convinced of the nature of that disease, the only way of proving it in a court of justice would be to examine the structure of the heart under the microscope, by the aid of which the fatty globules could have been discovered, because this is not merely a deposit of fat on some part of the heart, as may be understood by some, but it consists of a morbid process by which the structural tissues, especially the muscular, is transformed into fat, which renders it less contractile and diminishes its elasticity, thereby rendering it liable to stop and produce sudden death at any time. Now, this disease the woman had, and whatever can be said against the man don't disprove the fact that it was undermining her constitution for several years. Some other symptoms during life might have corroborated our diagnosis more fully, this is the condition of the heart's impulse; the sounds should have been weak, especially the systole, or first sound of the heart, and its movements slow: this should have been indicated by the pulse; but I had no opportunity to witness it, because I had never seen the woman before, and she was pulseless when I was called there.

I am expecting to meet with several objections. Some may say: "The French doctor would be wrong if he says there was no water in the brain and on the heart, because Dr. Bennett has seen it, and how can he account himself for that inflammation of the intestines, for fatty degeneration of the heart could not have produced it?"

It is known that in fatty degeneration of the heart, death begins at the heart, which stops, therefore the circulation is arrested and the blood stagnates, and when the latter is so thin as to delay its coagulation the water exudes from it all the time it is fluid, and permeates through the walls of the veins by the process of endosmose, and it is really where the blood was found that transudation

took place, that is, in the brain, where the veins were gorged with blood, and about the heart, which was said to be full. Therefore, the water found was not the effect of disease, but due to post-mortem changes. The inflammation of the intestines can easily be accounted for if we know that the Saturday before her death, while menstruating, the deceased went out in the rain, wet her feet, and consequently caught cold, and was taken sick; her menses stopped, she felt pains, &c. She was but little better the next day when her catamenia started on again, and the inflammation made its progress until the time of her death, and was, no doubt, the cause of her death happening in that time rather than in any other, for we know that inflammation of any degree always throws more work on the heart. Therefore it may be concluded: First, that fatty degeneration of the heart was the cause of her death; second, that such imperfect investigations as were made could never lead to any better conclusion than none at all; but one good thing of it, that should not be omitted, is that it did not do any harm. This is, no doubt, founded on the same homœpathic principle that if sugar pills do no good they do not do harm.

In giving my testimony on the case, I was asked to give my opinion regarding the cause of death. On my refusing to do so, I was told I had to answer all the questions. My reply was, I should not answer unless I was allowed the usual fee of a *medical expert*. The day of the trial a judge said that if he had had the power of the coroner he would have committed me. It is too bad he did not have that *supreme power*. That would have been quite a peculiar way of treating decent people; for I was not aware of being guilty of *adultery* or other crime that could condemn me to jail; nor was I found *drunk* in the streets, as far as I can remember; and I do not think it was for obliging me to answer, because this judge knows, or don't know, that a medical man may be summoned as a witness in two ways: first, as a common witness; second, as a skilled witness or expert. In the first case the physician is called to state facts; in the second to interpret them.

Now, in such cases as when called as a common witness, is a medical man compelled to give his opinion regarding the cause of death, when asked to do so? No more than a judge who is called as a common witness in a law-suit is obliged to give his judgment in the matter. He is called to state facts and not to interpret them; that is, he is a common witness and not an expert; and upon those facts and other circumstances taken into consideration, physicians give their diagnoses and judges their judgments, but not unless they are chosen or appointed to do so, and whoever is chosen or appointed is entitled to his fee. For instance, a physi

cian could be compelled to state that he had sold, given, or administered poison to a person, if he had done so; but whether the said person had died from the effect of that poison or from some disease, is a matter of opinion that should be founded on facts, and that nobody can oblige him to give unless he is willing to do it or his fee paid. This is the law of Forensic Medicine, which suffers no commentaries, and it is to be regretted that the thoughts and judgment of this man do not agree with this important science.

WHITEHALL, September 25, 1872.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE MONTREAL GENERAL HOSPITAL.

Case of Scirrhus of the Pylorus—Remarkable Absence of Pain—Death. Under the care of Dr. GEORGE ROSS. Reported by Mr. Edwin A. Gaviller.

L. P., aged 50 years, was admitted into the Montreal General Hospital on the 22nd of September. 1872, complaining of constant vomiting. Was a native of France, but parents English; are both dead, but not known of what diseases; has been a sailor for thirty years; enjoyed perfect health until the age of nineteen, when he contracted a chancre followed by a non suppurating bubo; was salivated. At twenty-four had chancres again, with a suppurating bubo; was two months in hospital. In 1 68 was laid up again with what he calls general debility; subsequently to this he had a number of ulcers upon the body, which were treated as syphilitic and all healed; not been laid up since until the present time. He now dates his sickness one year back; at this time he began to find himself given to vomit after eating; at first most things were retained, but the salt meat which they were given to eat he would invariably reject, but now vomiting takes place after the ingestion of almost any food, no matter what; has had slight pain in the back, but none at any time in the stomach; has sometimes felt as though food stuck in the throat; the vomiting would generally occur from five to twenty minutes after eating, and

would be painless and without effort, the egesta generally consisting simply of the food which had been taken; they were not sour nor accompanied by any mucus: no flatulent distension; never vomited blood or black matter before coming into hospital; has always been very temperate.

His hair is grey; skin extremely dark, or rather bronze in color, dry and moist, and with desquamating patches on the hands and arms; great emaciation; weighs only 94 pounds; tongue smooth in the centre, somewhat coated at the sides; bowels much confined, moved spontaneously only once in ten or twelve days; abdomen very much retracted, and the walls intensely firm and hard, so much so that no information could be gained by palpation; no tumour could be felt; no enlargment of liver or spleen; no tenderness on pressure anywhere; pulse small and weak, 90 to 100; respirations 16 to 20; heart and lungs found normal.

He was at first ordered nothing but milk and lime-water, which was retained, but after three days this also was rejected in a partly curdled condition. Then ordered Bismuth Nitrat, gr. v., Pulv. Zingib, gr. ij., three times a day. Vomiting continued; some days subsequently vomited about half a pint of dark, grumous-looking matter, which was quite fluid, evidently altered blood; this was independent of any food which had been taken. It was repeated several times within the next few days, but even in larger quantity; still there was no pain anywhere, or at any time; no distension; no retching; he could now retain nothing—beef-tea, cornstarch, brandy, &c., were given without effect.

The diagnosis now made was cancer of the stomach, probably affecting the pyloric extremity. The existence of ulceration with it was also strongly suspected from the dark vomiting above described, but the entire absence of all pain (and he was repeatedly questioned on this point) was observed as very unusual.

On the 1st October he was ordered a pill of Argent Nitrat, and on the 7th this was changed for the Oxalat Cerii, and he was given brandy and soda water, which for many days was the only thing he could take. He sank gradually from exhaustion, and died at 7:30 p. m. on the 16th October.

AUTOPSY SIXTEEN HOURS AFTER DEATH.

Rigor mortis not well marked; noticed some purpuric spots on abdomen not remarked during life: on making sectio cadaveris found total absence of fat, and muscles extremely attenuated; in fact, hardly anything but skin and bone; lungs healthy in color, but small, not filling whole of chest; crepitant, except small portions which were collapsed at apices: several pleuritic adhesions; some

effusion beneath pericardium of clear serum; heart normal, but very small; liver and kidneys healthy, but also reduced in size; supra-renal capsules (specially examined on account of the very dark bronzing of the skin) were rather large and firm, but normal in structure on section, and not beyond the normal dimensions or weight; spleen healthy, but presenting a small, bony plate imbedded in its capsule; stomach somewhat reduced in size; pyloric extremity, for a distance of about three inches, involved in a firm, dense, fibrous mass, whitish in color, with a few pink spots and numerous indentations on the surface; section showed it to be very hard and distinctly fibrillated; the infiltration terminated abruptly at the pyloric orifice; this opening was much narrowed in calibre, admitting only the large end of a blow-pipe, (about the size of a goose-quill); the inner surface of the tumor was irregular, partly greyish in color, and presenting an oval ulcer on the side of the greater curvature one-half inch long and one-quarter inch broad; several glands in the neighborhood were much enlarged, and some of them breaking down into soft semi-purulent matter; small intestine much reduced in size, and mucous membrane partly of the same greyish color; brain not examined.

Case of Cancer Close to the Mammary Gland in a Male who had had Epithelioma of the Lip—Excision—Cure. Under the care of Dr. George Ross. Reported by Mr. Edwin A. Gaviller.

J. S., a Canadian farmer, aged 44 years, was admitted into the Montreal General Hospital on the 10th September, 1872, with a firm tumour of a globular form, situated about three-quarters of an inch from the left nipple, towards the mesian line. It is about the size of a hen's egg, measuring half an inch in diameter, and projecting three-quarters of an inch from the surface. He has always enjoyed good health, with the exception of an attack of inflammatory rheumatism one year ago. Had a cancerous growth burnt away from his lower lip by caustics fifteen years ago, after it had been growing there for three years. The present lump began previously to the appearance of the one just spoken of on his lip, in the form of a small, dark spot, which he believed to have originated from the pressure of a sharp piece of wood against his chest whilst at work. This had only very slowly increased until within the last four months, during which time alone probably three-fourths of the entire mass had been added on. He had never had any pain in it. It presents now a dark, bluish, circular patch in its central portion, the size of a sixpenny bit, and over

this area the skin is thin and adherent to the surface of the tumour. It is freely moveable over the pectoral muscle. It was looked upon as cancerous, and excision advised.

Accordingly, on the 10th September, the tumour was excised by Dr. George Ross by means of an elliptical incision, enclosing the portion of affected skin. The nipple was included, the length of the incision being three and a quarter inches.

On cutting into the tumour from behind it was found to contain a number of cysts (four or five) which held grumous blood and some deposit resembling fibrinous layers upon their walls. The largest cyst was that nearest the outer surface, about the size of an almond, and contained colored serum and a small detached cheesy mass. The anterior portion of the tumour, for a depth of about half an inch, consisted of a peculiar, dark-yellow, toughish, fibrinous substance, immediately beneath which was the cyst last mentioned.

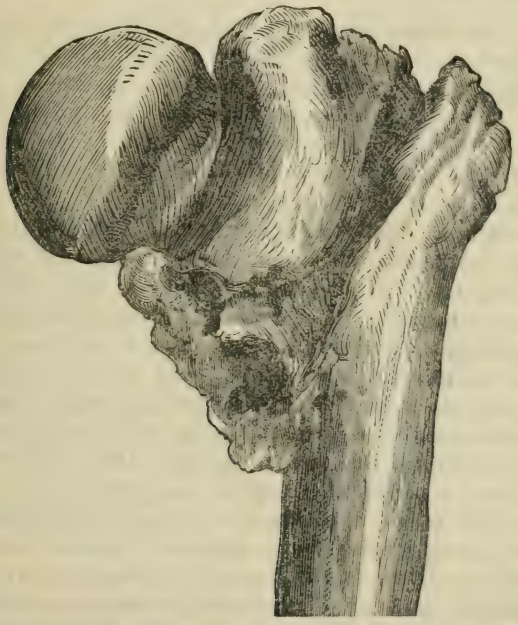
The wound was dressed with carbolic acid lotion (1 to 40) and healed rapidly. He was discharged cured on the 23d September.

Case of Extra-Capsular Fracture of the Femur in a Woman aged Seventy-five years—Death at the end of Four Weeks. Under the care of Dr. GEORGE ROSS. Reported by Mr. Edwin A. Gaviller.

J. S., female, aged 75 years, was admitted into the Montreal General Hospital, with a fractured thigh, on the 21st August, 1872. The preceding day she had been stepping from the door of her house, when her foot slipped, and she fell upon the sidewalk, striking heavily the right trochanter. She was unable to get up again, but was raised by bystanders and carried into the house. Was seen the same evening by Dr. Ross, who had her conveyed to the hospital the following morning. There was now shortening to the extent of one inch and a half; marked eversion of the foot: excessive pain upon moving the limb, during which crepitus was distinctly felt, and the great trochanter was found to rotate through a much smaller arc than that of the opposite side. Careful examination of the fracture was almost impossible, owing to the great pain and the desire to inflict as little as possible of it upon the patient, who was an extremely slight and feeble old woman; but it was believed to be an *intracapsular* fracture, from the age of the patient, and from the slight degree of violence which had sufficed to produce it.

It was thought advisable to try the effect of a light setting, although anticipation of ultimate reunion was hardly entertained.

It was accordingly put up by means of the ordinary extension apparatus of the hospital, with a ten-pound weight attached, and a very light long splint applied to steady the limb. Within a few days, however, a species of semi-delirium exhibited itself, and she would not permit any of the dressings to remain undisturbed. She was also extremely wakeful, moaning and talking, in spite of the exhibition of moderate doses of chloral: consequently the setting was entirely removed, and as the sacrum seemed to be becoming tender a large water-bed was furnished her. In spite of this precaution, however, and the protection of the part by soap plasters, a large bed-sore formed in that situation. Shortly after this diarrhœa set in, which resisted all remedies, and she finally sank exhausted, and died on the 19th September.



The upper third of the femur and acetabulum, attached by the capsular ligament, were removed entire, when the appearances found present were those represented in the annexed wood-cut. The fracture was not, as had been thought, intracapsular, but extracapsular, the line extending through the bases of the two trochanters, outside the capsular ligament. This fracture, having thus occurred in a person 75 years of age, and simply from a false step and a fall to the floor, is a matter of some interest.

Reviews and Notices of Books.

Epidemic Cerebro-Spinal Meningitis, with an Appendix on Some Points on the Causes of the Disease, as Shown by the History of the Present Epidemic in the City of New York. By MEREDITH CLYMER, M.D., (Univ. Penn.) Fellow of the College of Physicians of Philadelphia, formerly Physician to the Philadelphia Hospital, ex-Professor of the Institutes and Practice of Medicine, University of New York, &c., &c. 8vo., pp. 59. Philadelphia: Lindsay & Blakiston. 1872.

This little volume, containing some sixty pages of reading matter, is simply a sketch of the history, geographical and clinical, of the pathology and treatment of this obscure disease, but has especial reference to the epidemic which lately prevailed in the City of New York. Accompanying it is a nicely got-up and instructive map of the latter city, showing the localities of cerebro-spinal meningitis in the epidemic of 1872.

The author has compiled some facts in the history of this disease which are interesting. It is thought by Mr. Tourdes, who seems to have taken a lively interest in the subject, that cerebro-spinal meningitis prevailed as an epidemic in Europe at different periods in the fourteenth, sixteenth, and seventeenth centuries, although owing to the incomplete description, and the absence of pathological facts the weight of these researches may be questioned. The disease was first seen and recognized on this continent in the year 1806, and from that time to the year 1860 occasionally outbreaks were experienced, chiefly in the Southern and Western States of the Union. In England cerebro-spinal meningitis seems never to have prevailed as an epidemic. Sporadic cases alone have been from time to time reported throughout that country.

An analysis is given of twenty-six post-mortem examinations held by Klebs, of Berlin, in which it appears that the *pia mater* is the exclusive seat of the purulent formation, and that the chief sites of the latter in the brain were at the base, and in the subarchnoid spaces between the infundibulum and the pores, along each side of the latter to the under surface of the cerebrum, and into the Sylvian fossæ. In the spinal cord the greatest collections of pus were found in the lower cervical and lumbar districts.

The manifestations of this disease are so various in the same epidemic, and again at different ontbreaks, that the author has

dispaired in such a small compass to chalk out a set of symptoms reliable on all occasions. For instance, the form and constancy of the eruption are so variable that it is utterly impossible to lay down any rule respecting this symptom. It appears from the author's statement on this point that in some cases the hæmic spots have not appeared until after death, which is certainly a remarkable fact, if it be well borne out by evidence. Of 98 cases admitted into the Philadelphia Hospital in 1866, 36 only had true patechiæ, 13 mixed patechiæ and erythema, 9 erythema and urticaria, 3 indistinct patechial mottling, and 37 no eruption at all.

As to the *treatment* of cerebro-spinal meningitis, Dr. Clymer admits the now established fact that there is no antidote to the specific pathogenic poison, nor can it be expelled by elimination. All to be done is to endeavor to stay the progress of the disease and to sustain, meanwhile, the vital powers. The remedies spoken of are, externally, the hot bath—102° to 106°—for a few mornings only; ice to the head and spine; counter-irritation to the same parts and the arms and legs, either in the shape of blisters, sinapisms, stimulating embrocations, or the actual cautomy itself. Internally opium is well spoken of in large doses, and the American physicians are in the habit of conjoining quinine when the disease occurs in material districts. The bromides are mentioned as meriting a fair trial, but hardly to the exclusion of other remedies. Chloroform and the subcutaneous injection of morphia seem to have been employed with comparative success in the New York epidemic, but their effect must be presumed to be simply palliative.

The appendix contains a number of interesting facts bearing on general insanitary conditions as factors of disease, and is well worthy of perusal. Altogether, Dr. Clymer deserves the thanks of the profession, especially in New York, for placing in their hands such a valuable pamphlet.

On Some Disorders of the Nervous System in Childhood; being the Lumleian Lectures delivered at the Royal College of Physicians of London, in March, 1871. By CHARLES WEST, M.D. pp. 131. Philadelphia: Henry C. Lea.

These lectures are certainly a rare literary treat, apart from the many original observations and truths they contain. Dr. West begins his first lecture with a short sketch of the founders of the Lumleian Lectures, which appear to have had their origin as far back as the year 1572, and to have been the joint production of

Richard Caldwell, Doctor of Medicine, and John, Lord Lumley, "who executed a joint deed laying a perpetual rent charge on their lands for the foundation of these lectures." Caldwell lived but a very short time after the performance of his munificent act, but Lumley survived many years, and, no doubt, came to fully appreciate the good he had done. It was at these same lectures that William Harvey first publicly taught his doctrine of the circulation of the blood.

Dr. West in his three lectures attempts to treat of quite a number of the more important nervous diseases peculiar to the child, but for want of time and space has been compelled to confine himself, in the case of some of them, to a special symptom or peculiar mode of treatment. Speaking of neuralgic pains in children he is especially particular in impressing on all the hazardous results that may ensue by a neglect of such symptoms. He says: "I have never, in infancy, known any instance of pain—severe, obstinate, or recurrent—for which, sooner or later, a distinct local cause was not found; and even in later childhood the rarity of real neuralgia is extreme." The importance of early attention, especially to headache and pain referred to one or other of the lower extremities, is also spoken of as indicative in the one case of organic disease of the brain, in the other of hip-joint disease. The author, referring to the occurrence of *epilepsy* in childhood, is of opinion that this accident is to a very great degree dependent on some disturbance of the nervous system dating back from infancy; but on the other hand he thinks the hereditary tendency to epilepsy comes into play later in life than the age of childhood, or as in the case of hysteria and insanity, contemporaneous with the evolution of the sexual system, and when the cares of life begin to worry and hang heavy on the individual. In his remarks on the medical treatment in epilepsy the lecturer attaches great importance to the bromide of potass, speaking of it as a specific in certain cases, while again in others its action appears to be only temporary.

Dr. West's favorite remedies in *chorea* are the hot-air bath at night, with, at the same time, a diaphoretic dose of tartar emetic, continuing this for three or four consecutive nights. He begins with an eighth of a grain of tartar emetic for a child of ten years old, which may be repeated every fourth hour; but he enjoins caution in its employment, as he knew of a choreic patient suddenly sinking after the administration, for a short time, of large doses of antimony. Speaking further of chorea Dr. West says: "The only remedy which, in my hands, has appeared to exert anything of a specific power over chorea, is the sulphate of zinc,

given in increasing doses. Of this, again, a very remarkable tolerance is speedily accomplished, and though as a matter of precaution I always begin with small do es, it is by no means unusual to find a dose of ten, fifteen, or twenty grains, taken four times a day with perfect impunity. I have never increased the dose beyond the latter amount, thinking that if three weeks trial—at the end of which so large a dose was arrived at—produced no result, the remedy might be considered to have failed."

The third of these most interesting and instructive lectures is taken up with the disorders of speech, and the mental and moral peculiarities and their disorders, citing a number of cases to illustrate his points. Here, in speaking of the training of children, and the too common practice of frightening them with a constant rehearsal of the hard facts of our creed, the author comes out in the garb of a sensible, but true Christian gentleman, when he says: "Some of the most painful death-beds which I have ever witnessed have been of those children whose over-anxious friends have striven to force upon their minds the deepest verities of our faith, in that definite form in which they are embodied in catechisms and formularies. It is easier to frighten than to console; the dark grave is realized, or at least imagined, more vividly than its conqueror; and the little child driven to look within for the evil which it does not know, and cannot find, but vaguely dreads, and would be sorry for if it knew it, has moved me to compassion only less for it than that I felt for its broken hearted torturers who have failed to learn that the little children—of whom our Saviour said that of such was His kingdom—were not called on to recite any creed, to profess any faith; but just as they were, in their helpless ignorance, were deemed fit to be folded in His embrace and to be held up to us as our example."

The Science and Practice of Medicine. By WILLIAM AITKEN, M.D., Edin.; Professor of Pathology in the Army Medical School. Third American from the Sixth London edition. Greatly enlarged, remodelled, carefully revised, re-written; adopting the new nomenclature and following the order of classification of diseases published by the Royal College of Physicians of London. With additions by Meredith Clymer, M.D., (Univ. Penn.) ex-Professor of the Institutes and Practice of Medicine in the University of New York, &c., &c. In two volumes, with steel plate map nd one hundred and eight wood-cuts; 8vo. Vol. I., pp. 1,056. Vol. II., pp. 962. Philadelphia: Lindsay & Blakiston. 1872.

This is the third American from the sixth London edition of Dr.

Aitken's well-known treatise on the Science and Practice of Medicine. It has received many additions from the editor, Dr. Meredith Clymer, which enhances its value, these chiefly having reference to articles on Camp Fever, Spinal Symptoms in Typhoid Fever, Typho-Malarial Fever, Chronic Malarial Toxæmia, Epidemic Cerebro-Spinal Meningitis, Cholera Morbus *et* Infantum, Chronic Alcoholism, Delirium of Inanition, Chronic Pyæmia, Syphilitic Disease of the Liver, Shaking Palsy, &c., &c., &c.

The sixth London edition was issued from the press about twelve months ago. During the previous eighteen months the author was engaged in a careful revision of the whole work, and he spared no exertion in making it "worthy of continued confidence as orthodox in its aim and practical in its bearing." The plan of the work has been remodelled, assimilating it to the classification adopted by the College of Physicians of London. This classification was followed by the author in the fifth edition, with a view of removing those difficulties which will arise from the indefinitness and complexity of medical terminology. It becomes a necessity for the purposes of registration of diseases and deaths, that a uniform system of nosology should be adoptod; hence the action of the Royal College of Physicians of London in appointing a Joint Committee, presided over by Sir Thomas Watson as chairman, to prepare a report on the nomenclature of disease. The origin and progress of this great work is of historical interest, inasmuch as it was suggested by a correspondence between Dr. Dumbreck of the medical department of the army, and Dr. Sibson, that a uniform system of nomenclature of diseases was needed for the use of the army medical service. This was as early as the year 1855, but it was not until the 9th July, 1857, that at the *Comitia majora* of the Royal College of Physicians of London a motion was carried "that a Committee be appointed to prepare a nomenclature of diseases, and that such Committee have full power to co-operate with other bodies." This action of the College of Physicians was taken in consequence of a letter addressed to them by the Hospital Committee of Epidemiological Society. The year following the labours of the Committee were interrupted in consequence of the passing of the Medical Act of 1858, and it was not until the year 1863 that they were resumed. The Committee at length completed their work, and in August 1867, the report was submitted to the College, and finally and unanimously adopted on the 28th November of that year.

Such is a brief history of the origin and progress of the nomenclature of diseases as adopted by the Royal College of Physicians of London and concurred in by other similar bodies in Great

Britain. This classification has been adopted by our author, and the synonyms, equivalents and definitions will be found incorporated in the text throughout both volumes. But as the author very properly observes, to secure this uniformity it must be adopted and taught by the various schools of medicine throughout the country. The Government have done their part, fully impressed with the necessity of uniformity and to aid its general adoption a copy of the "Provisional Nomenclature" has been placed, free of expense, in the hands of every registered practitioner of medicine of England, Scotland, and Ireland.

Furthermore, to show the earnest desire of the Government to secure the universal adoption of a uniform system of classification, the Secretary of State for War, the Board of Admiralty, and the Secretary of State for India, have all and severally adopted the work of the College of Physicians, and it is distributed to the medical officers of their several departments, so that in future all official reports of diseases and deaths in the army and navy will have the stamp of the "Provisional Nomenclature" and be in conformity with its arrangement.

Compared with those gone before, the present edition has received additions which are equivalent in amount to a third volume, and yet the size of the book has not been materially increased, inasmuch as a special font of type has been prepared, in which the clearness of definition has been preserved without adding materially to the bulk of the volumes.

During the past fourteen years, when the work was first given to the world, advances in the science and practice of medicine have been very numerous and important. The author has embodied all the more recent observations that have been made. The subjects of pathology and morbid anatomy, in Part I., have received careful revision, and have been extended. This was rendered necessary as introductory to succeeding parts, and the subject of the prevention of disease, as well as its treatment, have been more fully discussed. Many diseases which in former editions were passed over unnoticed are here introduced. This has been rendered necessary in consequence of the adoption of the new classification of disease.

The tables for recording the bodily temperature in disease have received, at the hands of the author, a careful reconsideration. Tables were published in former editions of the work, but these in the present edition appear to us unnecessarily complex, and although they would do very well for use in a military hospital, where the labour of the physician is seconded by efficient and experienced assistants, yet we do not think that they are applic-

able to civil hospital practice, nor could they be employed in private practice with any chance of being kept with any degree of accuracy. We have thought it well to dwell on the subject of classification as illustrating the general scheme of the work.

The author acknowledges the assistance which he has received from many "kind fellow-workers in the profession." Dr. Blatherwick, Staff-Surgeon in charge of the Lunatic Hospital at Netley, gave him many practical suggestions concerning disorders of the mind. Dr. Balthazar W. Foster, Professor of Medicine in Queen's College, Birmingham, revised the section on diseases of the heart and arteries, and furnished the author with many valuable sphygmographic tracings. The use of the sphygmograph is by no means general, nor do we believe it will ever be brought to anything like practical reliability. In the hands of a few men it has certainly yielded results which should convince the greatest skeptic; taking for instance, a well-marked case of aortic obstruction, the tracings are apparently different and distinguishable from those given in a typical case of aortic regurgitation, yet we do not require the sphygmograph to enable us to determine these varying conditions. The instrument requires very accurate adjustment to enable the observer to record the tracings, and even then they will be varied according to circumstances for which even the most practical worker will be unable to account.

In the section on diseases of the throat and larynx the text is, in part, based on the lectures delivered by Dr. Morel McKenzie at the London Hospital, and Dr. McKenzie's assistant, Mr. Lennox Brown, has enriched this portion of the work by the execution of new wood-cuts, in illustration of the usefulness of the laryngoscope in diseases of the larynx. On the subject of parasitic diseases the author acknowledges the assistance of Mr. T. W. Anderson, of Glasgow, who furnished him with wood-cuts in illustration.

To Dr. Balfour the author is indebted for revising and correcting the medical geography of disease, and also to Dr. Henry Marshall and the late Sir Alexander Tulloch he accords the merit of having first called the attention of the military authorities to the various deteriorating agencies by which the British soldier is affected in different parts of the world.

Altogether, this work is of great merit, and stands unrivalled as a text book for the student, or work of reference for the practitioner. There is no work in the English language which contains more information on the science and practice of medicine. The index is very full, and each volume is furnished with an elaborate table of contents. The publishers have done their work with the

usual care of the well-known house of Lindsay & Blakiston, and have given to the profession two handsome volumes which should be in every physician's library.

The Physician's Visiting List for 1873; being the twenty-second year of its publication. Philadelphia: Lindsay & Blakiston. Sold by all Booksellers and Druggists.

We call the attention of our readers to this indispensable little work. We say indispensable because it becomes so to those accustomed to its use. By employing the "Visiting List" the medical practitioner can keep an accurate account of his day's doings. These are simplified by the use of a cypher which is recommended to be employed. There is a space for memoranda for each month of the year; for addresses of patients and others; for nurses addresses—this latter is especially useful—for what physician is there who is not compelled to recommend nurses to their patients. Next we have bills and accounts asked for. Next space for memoranda of wants, for obstetric engagements, vaccination engagements, and a department for each month, in which short notes of obstetric case can be reported, in which anything of special interest occurs. A record of deaths, and lastly, space for general memoranda.

We have been in the habit of using "The Physician's Visiting List" for years, but have always procured an interleaved edition. This will be found of special use, as the practitioner has at hand the means of taking short notes of special cases at the bedside, to be more fully recorded in his note-book at his leisure. We freely recommend this little work, and feel satisfied that those who have once employed it in practice will rarely relinquish its use.

RECEIVED FOR REVIEW.

We have received a pamphlet entitled "Meteorology and its Professors," in which there are some pertinent and, perhaps, not too severe strictures on the "Montreal Observatory" and its Director. The pamphlet is of such a nature as to demand the attention of all concerned in the science of Meteorology. Receiving it only a few hours before going to press we must defer any criticism; it will, doubtless, receive a full share of that before our next number.

CANADA

Medical and Surgical Journal.

MONTREAL, DECEMBER, 1872.

SANITARY REFORM.

Some months ago, at a time when our city was suffering from an epidemic of small-pox, discussion was held on the necessity of having a Government Sanitary Commission or a Central Board of Health, or some legally constituted body, to hold powers under the General Government and enforce on communities matters of sanitary reform. At that time we were told that by the Act of Confederation all municipal matters were left in the hands of the local governments, and consequently any action of a central board of health affecting the taxation of cities could not be enforced without the sanction of the Local Government of the Province to which the city belonged. This would, of course, be such a round-about way of arriving at legislative reform in matters affecting the health of the people that the subject was dropped. But again we return to the charge, being convinced that anything which affects the health and lives of the inhabitants of one portion of the community must react on the prosperity of the whole country, and, therefore, in our opinion, becomes a matter, not for local legislation, but to be dealt with by the General Government. It appears certain that unless the subject is manfully grappled we will, at some future day, experience all the fearful consequences of having neglected measures which would, at least, place our country in a better position for meeting the ravages of epidemic disease.

We need not seek to put the subject aside, it has to be met, pondered over, and action taken thereon, and that without delay. Everything points to the probable advent of epidemic cholera during the coming season of summer. We do not desire to be looked upon as an alarmist, but deem it prudent to take advantage of the experience of the past, and when we see epidemic cholera spreading from town to town in Prussia and Austria, following

very much the same course it pursued in 1831, we cannot but consider it highly probable that we will have it amongst us before very long. The disease in 1832 broke out in Canada in June, being brought amongst us by the tide of emigration. The same may occur in the present instance, but inasmuch as the ocean is crossed in ten days, instead of ten weeks, we may look for it a little earlier.

But to return to the means to be adopted to legally secure sanitary reform. Are reforms needed? Have we arrived at the very acme of sanitary excellence? Is our death rate of thirty-six per thousand solely due to causes which are not preventable, and that if we do get rid of a rather large proportion of infants, are they merely those puny and unhealthy offspring who, if they survived the first year of life, would still hold such a frail tenure of existence as would preclude their arriving at adult age? Is our system of overcrowding of our dwellings and their inmates a mere chimera? Do we possess the very best and most reliable means of registering, births, marriages and deaths? In fact, can we in Canada secure any definite and reliable statistics of the increase or decrease of our population outside of emigration? Are these subjects better fitted for the action of our local legislatures than for the General Government of the country?

We think it a mistake if these questions are referred for decision, or left in the safekeeping of our local legislative bodies, as they are decidedly of vital importance to the Dominion. A few of the requirements for instituting a definite system of sanitary reform may be advantageously enumerated. A consideration of the soil, the climate, the state of the air, the condition of habitations, the water supply, ventilation, the means adopted for the removal of excreta and house refuse, drainage, the effects of factories on the health of the people, and also of the various occupations on health, the means to be adopted to prevent the spread of contagious or infectious disease, or, in other words, how to deal with epidemics when they do occur.

We may state that we are without any definite legislative enactment on these important subjects, and that when disease and death is amongst us all is flurry and scare. Those whose means admit, generally remove themselves and families to a more genial clime, but the poor man is left to the consequences of the spread of epidemic disease which might have been prevented by the adoption of wise and timely measures. But these necessary precautionary measures will not be adopted by individuals nor by smaller communities, and even if they were it would not be efficient in preventing the spread of disease. To

secure any beneficial results the action must be general. What has been the result of our Vaccination Act introduced by our legislature a few years ago and operative alone in the larger cities of Canada? From the constant influx of the country population to the cities the disease of small-pox has been kept alive. The large proportion of persons coming to reside in our cities, attracted thither by the increase in wages, are unprotected against the disease by previous vaccination. The records of our hospitals, if searched, would reveal the fact that nine-tenths of the fatal cases occurred in unvaccinated persons; many of these persons came from the country parishes. So it will be in matters of general sanitary interest. If any legislation is attempted it must be for the Dominion, otherwise it will simply be useless, inoperative and disgraceful to ourselves as a civilized community.

THE SILICATED CARBON FILTERS.

The absolute necessity of filtering drinking water in this city has been long admitted. The water of the Ottawa which is pumped into our reservoir and thence distributed to our dwelling houses has been proved to contain a large quantity of animal and vegetable matter, besides parasites, which are injurious, if not dangerous, when taken into the human stomach. The subject of helmin thology is, as yet, in its infancy, although Dr. T. Spencer Cabalt and other workers are earnestly pursuing their researches. Drinking water is admitted to be a fruitful source of parasitic diseases of various kinds, and it is only by careful filtration that foreign matter can be separated. Our water works are barren in any mechanical means for the purification of the water; it become, therefore, advisable for individuals to adopt measures which are neglected by our Water Works Committee. This can be done by employing a Silicated Carbon Filter. By reference to the advertisement, on the outside cover of this journal, of Mr. J. V. Morgan, agent for filters prepared at the works of the Battersea Company, London, England, it will be observed that the price of these useful and necessary instruments brings them within the reach of all; and in view of the possible advent of cholera we think it prudent for all householders to adopt measures which will, as far as the water used for drinking is concerned, remove the chance of taking into their stomachs disease-germs which are known to favor the generation of disease leading, in some cases, to the most serious and disastrous results.

We have received the following from Messrs. T. Morson & Son, Manufacturing Chemists, Southampton Row, Russell Square, London, and willingly give it insertion:

Sir,—Mr. Enno Sander, of St. Louis, reported to a meeting of the American Pharmaceutical Association that he had tested several specimens of creasote, and had found only one to reply to the glycerine test. This confirms my statement made at the British Pharmaceutical Conference, and published in the *Pharm. Journ.* of the 21st September. Since these observations were made, we have examined numerous imported specimens and have found only one, that produced by Mr. Trommsdorff, to be the genuine creasote of Reichenbach. All the others were phenic acid, or a mixture of that acid in large proportion.

I have no doubt that creasote may be obtained by the distillation of various resins. The interesting remarks on Guaiacol made by Mr. Williams at the Brighton meeting prove, at all events, that it may be prepared from Gum Guaiacum.

T. N. R. Morson.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

It becomes our pleasurable duty to announce that W. L. Copeland and L St. John, graduates of McGill College, Session 1872, passed their examination for the membership of the Royal College of Surgeons of England.

TO CORRESPONDENTS.

Henry C. Lea, Publisher, Philhdelphia.—Your communication of the 12th November received. Messrs. Dawson Brothers announce to us that your parcel has been burnt in transit.

J. B. Lippincott & Co., Publishers, Philadelphia.—Your parcel has not been received. Perhaps it has shared the same fate as that of Messrs. H. C. Lea, Philadelphia, and D. Appleton & Co., Publishers, Broadway, New York. Nothing has been received from you up to the time of our going to press.

Parcels sent by express, and directed as below, will not go astray, and will receive prompt attention:

Dr. FENWICK,

Editor Canada Medical and Surgical Journal,

Montreal.

From the most recent sources we learn that cholera is advancing Westward. In Austria it has appeared in Buda, Pesth, Prague and Vienna, and up to the present time upwards of 5,000 cases have occurred, with a mortality of nearly fifty per cent. The disease appears to exhibit the same intractibility and fatality. In Poland the disease is increasing in the large towns, Warsaw, Lemberg and Dantzig. In the latter city as much as five out of every six persons attacked perish.

Medical News.

CHOLERA.

Bad tidings have been received from Poland, where cholera has derived a fresh impulse from the late holidays of the Jews. On the occasion of their autumn holidays they generally flock in great numbers from the country and the villages to the larger places, throng their narrow places of worship, filled with offensive, foul air, for the greater part of the day, inflicting upon themselves and their children fasting and other religious observances. This, as well as the large meals of unwholesome food in which they are used to indulge in the intervals of fasting, has given new strength to the epidemic. The largest increase has been witnessed in Lemberg and its vicinity, where the total number of cases of cholera had been augmented by about 200 within the last two weeks of September. Up to October 1, in the whole Province of Gallicia, 224 places have been visited by cholera. The number of cases known amounts to 6,941, out of which 2,176 ended fatally, 2,196 recovered, 1,130 remaining under medical care. Warsaw, too, and the whole of Russian Poland is still gravely infected. The only course adopted by the authorities there, with the exception of Petersburg, is to conceal the facts. Another outbreak near the Baltic coast, close to the Prussian frontier, is reported to have taken place quite recently in a little place named Shetéllen. In St. Petersburg itself no fresh cases have occurred since the 5th ult. The epidemic there has extended over three months and a half, with 3,413 cases and 1,693 recoveries; making a daily average of 33 cases, and a percentage of one-half per cent. in 650,000 inhabitants.

From Hungary we hear it is officially announced that the cholera has broken out in the district of Gumbinnen, in the vicinity of

the town of Johannisburg, and that several cases have proved fatal. Ninety-four cases of cholera have occurred at Buda, twenty-seven proving fatal. Twenty-nine soldiers were taken ill simultaneously, and five of them have died.

Typhoid fever has lately been raging in Berlin, owing, as is believed by the medical profession, to the infection of the water by sewage, in consequence of the extraordinary drought of this summer. The average mortality is about four per cent. Doctors advise their clients to abstain from water as a drink altogether if possible—at least if not boiled previously.—*Medical Times and Gazette.*

CARBAZOTATE OF AMMONIA IN PLACE OF SULPHATE OF QUININE.

Dr. Dujardin-Beaumetz recently reported to the *Société de Thérapeutique de Paris* his investigation of the character of this combination of ammonia with carbazotic, picric, or trinitrophenic acid, and especially with reference to its use as a substitute for sulphate of quinine. After mentioning the successful employment of this salt in the treatment of intermittent fever by several persons, Dr. Beaumetz detailed six cases treated with like result by himself, and also mentioned the results of experiments made upon both men and animals. Like quinine, carbazotate of ammonia diminishes the strength of the pulse and induces languor, cephalagia, and even delerium, and finally is eliminated by the kidneys. The clinical results may be summed up as follows:

Case I.—Quotidian ague; recovered after four days of treatment; daily dose from one to two centigrammes of the substance in pills. *Case II.*—Quotidian ague (sulphate of quinine having been given without effect); complete recovery after five days; five pills used. *Case III.*—Tertian ague; recovery after eight days; two pills daily. *Case IV.*—Quotidian ague; recovery after eight days. *Case V.*—Facial Neuralgia; speedy recovery. *Case VI.*—Tertian ague; sulphate of quinine had been administered during seventeen days without result; completely cured after the administration of about one grain of the salt, extended over the period of two days.

The Doctor thinks that one-third to two-thirds of a grain daily will suffice to suppress the paroxysms of intermittent fever, and says that, given in these doses, the drug has not been known to produce bad effects; indeed it seems to be better tolerated than sulphate of quinine, the physiological action of which it resembles.

THREE-GRAIN DOSES OF MORPHIA.

A painful cause of death has occurred at Corower, in the interior of the colony of Victoria, after the administration of two three-grain doses of acetate of morphia, on the prescription of a medical man in a case of alleged delirium tremens. Four grains divided into four doses had previously been prescribed, one dose to be taken hourly till sleep was produced. All this was taken without the slightest effect. The next day the doctor, emboldened probably by the failure of grain doses and the nature of the case, prescribed the following mixture: 18 grains of acetate of morphia, 3 drachms of tincture of cardamoms, 2 drachms of spirit of chloroform, with sufficient water to make a six-ounce mixture; two tablespoonfuls every two hours. After two doses he slept heavily, and died. It was found that a little more than the proper quantity of two doses had been taken out of the bottle, so that, instead of six grains, the patient had probably got seven or eight of morphia. We will only make two remarks on this case. The advance from one grain to three of morphia was an error. The patient had better have "raged" for three days than get sleep on three grains of morphia. Secondly, such medicines ought to be supplied only in single, or at most in two doses. A mixture with eighteen grains of morphia in it is not heroic merely, but terrific. And no chemist should dispense such a mixture without a personal interview with the prescriber of it, and an explicit understanding with, not the patient, but the person who is to administer it.—*The Lancet.*

Cholera is reported to have appeared at Dantzic and Culm in Prussia.

BLEACHED TINCTURE OF IODINE.

It is said that the sulphite of soda will discolor iodine and yet increase its effect. The *Med. Press and Circular* gives a formula for the combination, viz.: Tincture of Iodine; Glycerine, pure, aa. ℥j; Sulphite of Soda, ʒj; M. Rub the salt to a powder in a small mortar, and add the glycerine gradually; then pour in the tincture, and triturate gently until a solution is effected and the mixture assumes an amber color.

Ninety-four cases of cholera are reported from Buda, in Hungary, twenty-seven proving fatal. Twenty-nine soldiers were taken ill simultaneously, and five of them died.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Surgical and Other Cases occurring in Newfoundland. Reported by William Anderson, M.D., and C.M., Glasgow.

On March 2, 1869, I was called to see a primipara, aged 24, who had been in labour for twelve or fourteen hours. My first question was, "How long since the last pain?" This, neither the patient herself, who was quite sensible and apparently quite easy, nor any one about could answer, which, as a vaginal examination revealed a head well down in the pelvic cavity and an os uteri well dilated, was to me rather perplexing. On uncovering the abdomen I found two prominences, one hypogastric, the other occupying the left lateral and umbilical regions, and separated from that first mentioned by a depression passing obliquely across the abdomen, from the right hypochondrium towards the left crista ilia. I could not be certain as to the state of matters; repeated questioning as to pains, only eliciting repeated protestations of ignorance as to anything of the kind having occurred. I could make out nothing with the stethoscope that I could trust to, and under these circumstances resolved to unravel the case by delivering with forceps. The fœtus, almost inanimate, was followed by a gush of blood fluid and clotted. Giving the newly born a hasty roll on the floor and a dash with water, I introduced my hand as far as the fundus of the uterus and found the secondary prominence, formed of clots and placenta (detached); the uterus to some extent contracted on the mass; ergot was at the same time given, kneading and cold combining with it, to procure a fair degree of uterine contraction; the cold applications were somewhat heroically carried out, a fair-sized snow-ball being lodged in the uterus; after contraction took place the aorta was compressed with the thumbs, while a long bandage was being prepared, to be placed as a spica, taking its origin round both thighs and transversely over a large graduated pad placed in front of the aorta, and as far as

possible above the fundus of the uterus. The patient was then removed to a dry bed the pelvis elevated by pillows. She did not turn her pale face to the wall and pass to that bourne, &c., as did a somewhat similar case not long ago reported in the JOURNAL, but made a very good recovery. It seems strange that no author as far as I know, on post partum hæmorrhage even hints at compression of the aorta. I can fancy no means more efficient for directly effecting the end in view, and feel assured that though never spoken of, it must be very generally adopted. It is as readily accomplished after the birth of a child as though nothing more than the skin intervened, and, doubtless, would save many lives lost in attempting to stop hæmorrhage by efforts limited to the uterus only. One hand ought to be employed in or on the uterus, the other on the aorta, occasional jets of blood being allowed to stimulate contraction.

Case of Compound Dislocation of the Ankle-joint, with Comminution of the Fibula.

On July 21, 1869, I was called a distance of nine miles to see a woman who had fallen from a ladder. I found the patient a young married woman, aged 36, stretched on a bed, protesting vigorously against the efforts of a monoculous bone-setter who had been tugging at her for an hour or so. I found the left tibia projecting through a large aperture in the soft parts, its malleolar process broken close off and lying against the foot, which was everted and displaced to a great extent; the fibula was broken two or three inches above the ankle-joint. Chloroform having effected complete relaxation reduction was easily effected after flexing the leg on the thigh, and the patient was placed in bed, after the application of a side splint, the knee flexed. The antiseptic treatment was adopted, but set at nought by the patient after a few days, the application being found, at the second dressing, displaced by the end of the tibia. The case then took its course, as might be expected suppuration taking place round about, if not in the joint, and an abscess forming in the middle third of the tibia. Permanganate lotion was freely used and healthy granulation soon appeared. At the sixth week the flexed knee position became very irksome, and a straight back splint, with foot-piece, was adjusted. Partial luxation again took place, consequent on the the patient's uneasiness on a warm, close night, so the flexed position and side-splint were resorted to again. All went well, and at the third month the patient was removed from bed with the wound healed, a sinus or two excepted. From these a few considerable specula came away, and an abscess which formed over the

external malleolus gave out a small piece of dead bone. At the present time the patient is occasionally to be seen walking about without perceptible lameness, and it is only after prolonged walking that there is a slight halt. The scar is a little over three inches long. At the time of the accident the anterior tibial artery was torn through, the upper end of its distal portion, hanging down over the lower edge of the wound. The vessel was well closed and gave no trouble.

Case of Encephaloid of Skin of Forehead.

In September, 1871, I was asked by Dr. Fraser, of Bay Roberts, to see, with him, a man nearly seventy years old, with a large tumour exactly resembling a door-handle—a rounded knob with a narrow pedicle—growing near the right temporal ridge. A second growth, flattened and raised about one-fourth of an inch above the surface was found near the right cheek-bone. The pedicle of the large growth was tightly ligatured, and then both growths were smeared over with chloride of zinc, worked up into a paste, with its own bulk of starch and a few drops of water. Both sloughed clear away after a few days, a second application being made to the site of the pedicle of the large growth. All went well and there has been no return of disease.

In July, 1871, I was called to see a case reported by myself in the *Canada Medical Journal* for October, 1869. Elephantiasis Arabum, affecting the left leg and thigh of a woman aged 38. As stated in the report, the limb reduced very considerably after ligature of the external iliac artery, but speedily resumed its original dimensions. I was called on account of hæmorrhage, the result of sloughing occurring at the inner aspect of the calf. I found a large putrescent mass emitting a most sickening odour, and at once suggested amputation high up. This was assented to, and on the 31st August, with the kind assistance of Dr. Howley, from St. John's, and Dr. Fraser, from Bay Roberts, I amputated through the upper third of the thigh, cutting a skin flap posteriorly, and, by transfixion, a muscle and skin flap anteriorly. No vessel was found enlarged to any remarkable extent, and the number of ligatures applied was not greater than would be required in the same position in any other case. The patient had become exhausted to an almost dangerous extent before the operation, but as such cases will, made a very good recovery. She is now stout and hearty, and able to get about very actively with the help of a crutch.

In July of the present year a man, 60 years of age, showed himself at my surgery, with the whole of his lip cancerous, the parts down nearly as far as the chin, and laterally beyond the angle of the mouth, on each side, apparently involved in the disease. The lip was greatly enlarged, very stiff, and congested to such an extent as to show a probability of early sloughing. The patient complained of intense pain, preventing all rest and rapidly exhausting him, at the same time begging hard for relief. I applied chloride of zinc paste for a few days, bringing away a pretty thick slough. This method, however, seemed likely to be futile, so I took advantage of the presence, on a visit, of Dr. Simms, of St. John's, and Dr. Fraser, to remove the whole diseased mass with the knife, as my patient's importunity for relief was only encouraged by having taken his case up. I knew the operation would surely relieve present misery, and possibly give a certain respite from death. The lip, with the soft parts covering the jaw anteriorly, were removed by an eliptical incision, the piece removed measuring five inches transversely, and between three and four vertically, leaving a good void to make up. The vessels secured, an incision from the middle of the lower border of the first was carried down very close to the crico-thyroid membrane, and two others from the lower end of this, transversely, as far as the anterior border of the sterno-mastoid muscle of each side. The flaps thus marked out were then raised as far as their bases and attached superiorly to the surfaces formed in the first incision and in the middle line to each other, leaving a somewhat rhomboidal surface under the chin to heal by granulation. On the left side the parts were brought close together and adhered, partly by first intention, partly by granulation. On the right side they were not brought quite close together, which permitted free syringing the mouth. Erysipelas set in a week after the operation, affecting the right side of face, the nose, ears and forehead, and prevented interference for securing of secondary adhesion. Some time afterwards the edges were pared and adhesion secured. The patient is now in comparative comfort, and is able to work about his farm and garden, and is much improved in general condition; still the end is only staved off, and in performing such an operation under such circumstances, whatever may be the amount of trouble, the surgeon must be content to see the disease resume hold of its victim sooner or later, and the direct end of all surgical practice frustrated, the proffered cup of cold water being his only comfort.

On October 25, of this year, a boy aged ten years was kicked by a horse on the forehead, to the right of the middle line. On

examination I found a wound of the soft parts, one inch long, and transverse in direction, situated two inches directly above the right eye-brow. There had been free hæmorrhage, and the patient was slightly collapsed but quite sensible; pulse, 86. Superficial examination showed a falling in of the integuments, circular, with hard border all round. The finger introduced into the wound found fragments of bone. The patient having been put under chloroform, the wound was enlarged crucially and certain bleeding points secured. It was found impossible to remove the fragments, placed, as they were, overlapping the edges, and held so by depressed edges of bone, so the trephine was used at the upper edge of the gap in the skull, and the desired end accomplished readily, partly with lever and partly with forceps. The dura mater was found lacerated obliquely to the extent of an inch at the lower and internal aspect of the wound, and torn to a smaller extent on the same level externally. A small piece of detached brain substance lay in the wound. Fourteen fragments, large and small, were removed: four or five of them being small pieces of the inner table, about the size of pen nibs. The wound in the skull measured three inches vertically and transversely. The soft parts were freely cleansed of clots by syringing with 1 to 40 of carbolic acid, and the edges of the incisions made brought together with sutures of Indian hemp steeped in carbolic acid, a pad of marine lint and a few strips of sticking plaster applied over all. The scalp was shaven previously to the operation.. The patient was placed in a bed in a darkened room, and cold applied to the scalp. Diet, milk and water only. Pulse, 108.

October 26th, 9 a.m.—Pulse, 108. 1 p.m., pulse 124; slight pain at outer edge of right orbit; skin moist; patient quite sensible. ℞ Tinct. Aconite M. xij., Liq. Ammon. Acet., ʒvj., Aquæ ad. ℥iij., ʒi. tertius horis. Tongue dry; to have Calomel, gr. x., immediately. 10 p.m., pulse 108; tongue moist.

28th, 4 p.m.—Face flushed; pulse, 96 to 112; remaining stitches removed; cerebral matter in wound; patient slightly irritable; 15 grs. chloral at once; added 5 minims antimonial wine to each dose of the mixture. 10 p.m., face not so much flushed; bandage firmly applied over pad covering wound.

29th, 10 a.m.—Head cool; there has been but slight pain in head or sensitiveness to light. 2 p.m., restless; to have 16 grs. chloral every six hours.

30th, 9 a.m.—Pulse, 116; head cool. 6 p.m., pulse, 108; continues as before.

November 1st.—Bandage re-applied; considerable issue of brain

in wound; pulse, 120; omit mixture, as pulse is very small and there is great thirst; patient sensible.

From this date was simply kept quiet with chloral, as death seemed inevitable. He died November 4th, convulsions of a slight character occurring frequently.

I regret that a neglect to take notes at the time the case was in progress prevents me giving more than the essential facts of a most interesting case of abortion that took place in my practice last spring.

In the last week of April I was called a distance of sixteen miles to see a woman aged 26, the mother of three children, who gave the following history: She was confined of a male child, at full period, on December 24th, 1871. Two days afterwards the child died. She menstruated three weeks afterwards, on cessation of which intercourse took place, pregnancy resulting. On March 24th she lifted a heavy potfull of soap on to a pothook in the chimney, which act was very soon followed by hæmorrhage, and a cessation of nausea and morning sickness experienced since the cessation of menstruation. Three days after the hæmorrhage came on she found herself as large as she had been accustomed to be at the sixth month of pregnancy. Between this time and the date of my being called in April, no further enlargement took place, occasional discharge of a very fœtid character ensuing. On examination I found a pyriform enlargement extending a finger's breadth above the umbilicus, percussion dulness from that point to the pubes and extending several inches laterally. The swelling gave a sensation to the fingers very much like that to be felt over the seat in ordinary cases. Over the left anterior aspect of the swelling a placental sound could be plainly made out. On these grounds I made diagnosis of probable escape of embryo on occasion of first hæmorrhage, the placenta adherent, post partum bleeding, such as it was, giving rise to enlargement of the uterus; partly by mechanical distension and partly by the influence of uterine growth possessed by the ovum. The patient's general condition was one of great depression, with palor and loss of appetite. I gave a mixture of bark and ammonia, and also a strong infusion of ergot, with 15 grs. borax to each dose, directing the friends to acquaint me with results. No change took place, so I requested transference of the patient to Brigus. The ergot and borax got a further trial, being administered at frequent intervals for three days; the vagina well distended with marine lint, on the occasions of changing which water was injected into the uterus by means of a powerful ear syringe, the nozzle of which

fitted a gum-elastic catheter, moulded to direction of a uterine sound. No result followed, the placental sound not diminished, and swelling of same size. Patient was all the while losing ground, so I asked Dr. Fraser to see her with me. We tried galvanism and kneading in addition to the previous treatment, and this failing; Dr. Fraser recommended forcible dilatation of the os uteri, and the extraction of the uterine contents. This was done on the night of May 5th, and I succeeded in partially detaching the placenta, and in removing small fragments of it by a pair of throat forceps which fitted the direction of the uterine cavity very well. The vagina was again well crammed with the marine lint, and the ergot and borax mixture ordered to be continued at frequent intervals during the night. Next morning I found the patient in a highly alarming condition: the pulse 127, the features shrivelled, the breath having the sickly scarlatinal odour of peritonitis; the abdomen tender and distended; death appeared impending. The patient was greatly distressed by retching, so, fearing bad local effects from use of syringe, I gave several doses, of what amount I forget, of acetate of morphia solution, at half-hour intervals, till relief was afforded, and went home to take rest, expecting soon to learn that all was over. About half-past one on May 6th I received a message stating that not long after I had left labor pains ensued, and had resulted in expulsion of a large quantity of clots. I went and found a vessel containing a quantity of very fœtid material, like decayed blood clots, and two separate masses, like placenta, without membranes or remains of funis, not unlike a fresh clot of blood subjected to a stream of water. Patient seemed better. Hypophosphite of Soda was then given, and continued for some days with apparent constitutional benefit, and the ergot also for fear of hæmorrhage. The injections were continued twice daily until the returning water ceased to be tinged or bring away fragments of clot; the uterus slowly regained its normal size. The patient had a few ups and downs, but under good kitchen discipline ultimately made a very complete recovery. I mention the facts as they occurred, and will conclude by remarking that I think the morphia had time to exert the action it is supposed to have in instituting uterine action.

On May 5, a man aged 35 presented himself in a very distressed condition. He had had nasal polypus for nine years. The right nasal cavity was greatly expanded, and the hardened end of a very large polypus protruded beyond the edge of the nostril. This hardened condition was apparently owing to a rub with caustic administered by a medical man last year. I seized the mass with

forceps and pulled it away. Another took its place in the nostril at once. On removal of this the bleeding was frightful, its root and that of the other so friable that the usual twist had no effect. To stop this I had to plug the posterior nasal aperture, in which proceeding I thought I felt the rounded end of a third growth lying on the superior surface of the soft palate. Patient was requested to return in two hours time for removal of plug. This done, a solution of tanniu was thrown up by a Pollitzer instrument, but failed to pass up left nostril and down right. This suggested examination, and a large polyp was found where suspected. Various clever attempts were made at snaring this with the assistance of Dr. Fraser, who happened to be present, but to no purpose, so in the absence of a vulsellum, polypus and other forceps were used, likewise to no purpose. Then I passed the point of my right index finger behind the soft palate, patient freely gnawing my hand, and tried hard to break the pedicle of the growth by pressing down its lobe. In this I succeeded partially, and so brought the mass into view. It was then laid hold of by catch forceps and dragged out. No hæmorrhage followed. The man is now strong and well, and without symptoms of disease. I think the pedicle was attached partly to the nasal septum and partly to base of skull. Getting the growth out occupied more than two hours, the patient fainting several times from previous loss of blood and weakness. I had an opportunity of witnessing the prolonged stimulating effects of ammonia, and feel assured that if I had to trust to alcohol, with the wretched, depressing, and stupefying effects sure to have followed doses sufficient to stimulate to the same extent as the ammonia did, I should either have failed or come very near doing so. I never use either wine or brandy in practice, considering alcohol admissible only as the solvent of active principles of drugs.

Brigus, N. F., November, 1872.

Vesico-Vaginal Lithotomy in a Child Seven years old. By S. H. Tewksbury, M.D., of Portland, Maine.

(Read before the Maine Medical Association.)

The history of the case is shown by a letter from Dr. C. F. Bonney, of Cornish, in which he says: "Was called, Nov. 15th, to visit a child of Mr. John Chandler, Upper Bartlett, N. H.; was accompanied from North Conway, by Dr. Bragdon, who, at the time, was in charge of the case I found the patient lying on her left side, with lower extremities strongly flexed upon the trunk, and presenting a sad picture of long and intense suffering. I

gathered from the mother the following history of the case: The child had been from its birth rather delicate, but no indication of serious indisposition appeared until after her third year, when she showed signs of difficult micturition, the result, as was supposed, of injury of the spine from a fall. But after a time the urinary trouble ceased; at least escaped the notice of the mother. During the last six or eight months, however, she had had an almost constant desire to evacuate the bladder, attended with suffering so terrible that she had often begged her mother to kill her. I learned from Dr. Bragdon that she had been seen and treated by several physicians, no two of whom had been able to agree as to the nature of the case. As the symptoms pointed to urethral or cystic trouble, and as a satisfactory examination could not be made without placing the patient under the influence of ether, this measure, after some delay, was effected. I passed a common-sized female catheter into the urethra. The freedom and ease with which the catheter passed the canal disposed at once of the idea of urethral obstruction, and passing the instrument into the bladder a stone was clearly detected." Such was the description as given by Dr. Bonney. The doctor then closed with a request for me to visit the case with a view to an operation.

At my visit to see this case I found it to be as described and diagnosticated by Dr. Bonney, and that an operation was the only procedure to be adopted to relieve the sufferer. The removal of stone in the female by urethra, especially in a child of this age, I did not regard as a safe and justifiable operation, by reason of the danger of inducing incontinence of urine, which was liable to remain permanent. I therefore determined to make the vesico-vaginal section. This operation for stone in the adult female, whose vagina is of the natural size, I look upon as comparatively a simple one, but in this case exceedingly difficult, especially if I should attempt to close the opening into the bladder by sutures. The patient, however, being fully etherized, with the assistance of Drs. Bonney and Bragdon, of North Conway, and the child's father, I removed a stone the size of a pigeon's egg through the vagina and base of the bladder, and immediately closed the opening by six silver sutures.

I will describe the method in which the operation was performed. I first passed a small sound into the bladder to learn the size, as far as possible of the stone. I then commenced to gradually dilate the vagina, that I might be able to introduce one of Sims's small speculums, which, in a short time, I succeeded in doing. This brought the parts finely into view, and the instrument almost held itself by the tensely distended vagina. A grooved

director was then passed through the urethra, curved two inches from its distal extremity, with its convex surface pressing firmly in the median line against the base of the bladder, behind the neck. I then, with a sharp-pointed knife, transfixed the vesico-vaginal septum, following the groove in the director, dividing backward in the median line one inch and a quarter. I learned that it was necessary to cut in the groove of the director, and that the director should be pressed firmly against the septum, to hold the vesical and vaginal surfaces together, so that the openings in the two cavities should be in correspondence. The stone was grasped by the forceps, and a larger portion of it removed, though somewhat crushed. The other pieces were removed with a scoop, and the bladder thoroughly washed out. The sutures were applied in the usual manner for vesico-vaginal fistula, with the catheter in the bladder, and other requirements usually adopted in these cases.

The second day after the operation Dr. Bragdon, in a letter, says: "I found our little patient very comfortable. I removed the catheter that was in and introduced the other. Morphine ordered to be continued once in six hours."

Four days after the operation, Nov. 27th, Dr. Bragdon said: "I have seen the patient this afternoon and am happy to say she is doing finely. The catheters have been changed frequently. Morphine is administered twice a day." He also stated that there had been quite a quantity of sedimentary gravel passing away from time to time.

December 7th, on the fourteenth day after the operation, Dr. Bonney removed the sutures. Later, I received a letter from Dr. Bragdon, bearing date Jan. 12, 1871, in which he said: "For nearly one week after the removal of the sutures, she suffered some difficulty in voiding urine; then, for a time, was quite comfortable, but not entirely free from difficulty. About one week ago she presented symptoms like those existing before the operation. Having no ether with me at the time of my call, I deferred an examination until to-day, Jan. 12th, when, finding the symptoms still existing, I administered ether and examined by the sound, and found a stone of considerable size existing in the bladder."

He then advised my attendance on the case. Later, Dr. Bonney, by my advice, being sent for, he introduced a small pair of forceps and crushed the stone, which was of considerable size. Another introduction of the forceps revealed another stone, which was removed. Both were of the phosphatic character, and I may here state in regard to the first stone, that from an analysis by Dr. Gerrish it is principally made up of the ammonio-magnesian phosphates, weighing about two drachms.

I would here remark that Dr. Emmett speaks in his work on vesico vaginal fistula, of the frequent occurrence of calculi after the operation for fistula.

Dr. Bonney, in conclusion, says, June 12, 1871 : "I am happy to be able to add that the child has had no further trouble, and is, at this time, in the enjoyment of health."

REMARKS.

Stone in the female is comparatively of rare occurrence, its ratio to the male being one case in eighteen to one case in twenty-two, according to the different authors and as existing in different countries.

According to most authorities on the subject the operation may be performed in three ways. First, by lithectasy (through a dilated urethra) ; second, by lithotomy ; third, by lithotrity. Each has its peculiar merits.

The first, lithecsasy, is most available in females who have borne children, and especially those of lax fibre. Then the parts can readily yield to the necessary limits. This mode presents the advantage of overcoming the diseased state without recourse to a serious operation. It can only be used in connection with stones of comparatively small size, however. The operation with those of considerable size is liable to be followed by incontinence of urine, hence some other method is necessary.

The third method that I have named is lithotrity (with or without dilatation). Upon this some authors make the broad statement that it should be employed, with rare exceptions, in all cases above puberty.

All agree that in cases of stone of phosphate or uric character crushing can be used almost universally, and in the case of the oxalate of lime species, to the size of an inch in diameter. This operation presents the most favorable indications in the female, on account of the shortness, size, and dilatability of the urethra. It is contra-indicated in organic diseases, or in case of severe irritation of the bladder.

The second method, lithotomy, may be performed on the female in a variety of ways, two of which, the most important, we will notice, the supra-pubic, or the "high," and the vaginal. The "high," or supra-pubic, does not differ in women materially from the same operation in men. This, with modifications, is the only one commonly noticed by surgical authorities, Erichsen being the only author until a late date that gives the vaginal operation a place among the standard modes of procedure.

In connection with the case in hand we have to speak particularly of the vaginal operation. Not until recent times, since the

methods for the relief of vesico-vaginal fistula has been carried to such a degree of perfection, could this take position as either an approved or standard operation.

The relief of stone by this mode is not, however, of recent origin. Rousset, a French surgeon, has the credit of performing it first, in a case in which the bladder had pushed the anterior wall of the vagina before it, and protruded through the vulva. Fabricus Hildanus followed; and Gooch performed it in 1740, in a case having an existing ulceration of the septum. M. Velpeau has given the names of several operators who have adopted the vesico-vaginal method.

Most of the earlier operators speak only of the removal of the stone, and say nothing concerning the result as regards the formation of fistulæ. But sifting the literature on the operation of those early times, we are able to collect facts that go to show that the operation had little favor, on account of the resulting danger of fistulæ.

Of late this is changed altogether. The experience of the last ten years has shown that nearly every case of vesico-vaginal fistula, even when attended with great loss of substance, may be firmly and permanently closed by the improved plastic methods now used. How much more certainly the clean incision following the removal of a stone, attended with no loss of substance, can be easily seen.

M. Vallet, of Orleans, has the honour, I believe, of first performing lithotomy by a section of the vesico-vaginal walls, immediately followed by sutures. It is an operation possessing many and great advantages, for no part of the vesical walls may be incised with so little danger. Being in the median line, no vessels of any magnitude are liable to be wounded. The vesico-vaginal septum, being composed of dense tissue, is little exposed to urinary infiltration, and having a free outlet for the urine provided by catheter, such an occurrence is rendered improbable. Hence, the chance for a pelvic cellulitis is remote.

A few statistics of cases will show the relative frequency of the operation and its success. Dr. Lane, England, Oct., 1862, successfully removed a stone from an adult aged 38, immediately closing ing the wound by sutures, followed by complete cure. Dr. Lyon, Glasgow, in September, 1862, on adult aged 42; several sutures used; recovery complete. Dr. Aveling read an account of thirty-four cases, before the Obstetrical Society of London, which had occurred in Great Britain and in foreign countries, the details of which we have been unable to gather.* He cited a case of his own

* To be found at page 1, Vol. 5, Obstetrical Transactions.—[*Ed.*

resulting most favorably. Dr. Emmett, in his work on vesico-vaginal fistula, records several successful cases of lithotomy on the adult in this country. In August, 1862, Dr. Robert Nelson performed the operation with perfect success on the adult. The expediency of the operation was fully recognised by Mr. Paget, but his mode of procedure did not combine the best means for cure. He operated, for the first time, Sept., 1859, on a child three and a half years old. The size of vagina rendered the application of sutures impossible, and incontinence of urine was the result. Mr. Ferguson, March, 1862, operated on a child nine and a half years old, using but one suture. Incontinence resulted.

These are the principal historical facts concerning the operation that we have been able to collect. They certainly seem to prophesy that vaginal lithotomy may become a most valuable operation. For each time the operation has been performed in a proper case, with the improvements afforded by modern surgery, success has followed. The instances of failure may be clearly attributed to injudicious selection of the case, and the manner in which the details of the operation were carried out.

The facts show that in an adult female, and especially in the case of a large stone, vaginal lithotomy, with the improved management of the wound introduced by Sims and others, is the safest and best procedure devised, and deserves to become one of the standard operations of surgery.

And, in conclusion, I would state in regard to lithotomy in the child, that medical literature of the old world, as far as I can discover, affords no example of the removal of stone through vesico-vaginal walls, in which a fistulous opening did not permanently exist afterwards.

And the history of lithotomy in this country, as far as I have been able to learn, does not afford *any* example of the operation.

Case of Wound of the Knee-joint treated Antiseptically. By GEORGE A. BAYNES, M.D.

(Read before the Medico-Chirurgical Society of Montreal.)

I have been requested by several of my medical friends to read before this Society a case of wound of the knee-joint, which I treated antiseptically. I shall give the notes of a few others which have come under my notice, shewing, I think, strong evidence against primary excision.

On the 1st of August, 1871, I was called to see B. N., aged 19, moderately muscular, third son of a family of eighteen children,

nearly every one of whom were more or less inclined to be scorfulous.

On returning home from the field, carrying his scythe across his arm, he put his foot in a hole and fell with his right knee on the scythe, making a clean cut six inches long, from the insertion of the vastus internus downwards and outwards, completely severing the patella, through the synovial membrane, obliquely across the point into the fleshy part of the calf, exposing the cartilaginous surface of the external condyle of the femur, and I could feel with my finger the anterior crucial ligament. He did not appear to suffer from shock. There was but little bleeding, which was easily checked by torsion. I then washed out the wound with carbolic acid lotion (1 to 30), and bringing the edges of the wound as nearly into apposition as possible with wire sutures (hair lip pins would have been preferable, but being eight miles away from home I had to use what was at hand). I then applied a Fig. 8 bandage, with a long back splint, well padded and bandaged firmly to the leg, preventing any motion in the limb whatever, after which he was carried four miles to his own home. I gave him an opiate and left directions for the constant application of the lotion. I continued the same treatment throughout. On the 12th there appeared a slight baggng of pus on the outer edge of the knee which, after a poultice, I freely laid open. This was the only obstacle to the uninterrupted healing of the wound. At no time during his illness did his pulse exceed 110, and the temperature was normal after the second day; on the first and second it varied from 100° to 104°. On the 19th I removed the splint and rested the leg on a pillow. On the 2nd September wound quite healed, and can use his limb pretty freely with the use of crutches. The last time I heard of him was December 17, when he said his wounded limb was nearly equal to the other in strength, and quite flexible.

I find a case somewhat similar in the *Lancet*, Vol. II., for 1871 at page 29, in which primary excision was performed by Mr. Bartlet, Surgeon, Hospital Birmingham. The patient died on the fourth day.

Another case was treated antiseptically in the London Hospital. The wound was one and a half inch long. The whole joint was injected with a watery solution of Carbolic Acid (1 to 18), a posterior splint applied, and perfect rest enjoined. The accident took place on the 17th October: the splint was removed on the 1st November, when he could flex his knee without pain. He was discharged cured on the 16th November.

The next case was under the care of Mr. Russell, of New-Castle-

on Tyne. W. F. received a rectangular clean cut into the joint. The joint was syringed with carbolic oil dressing with rest. On the twentieth day after the injury the patient left the Infirmary with the perfect use of his joint.

He also reports a case of a man who had a burn over the knee, and falling down burst open the joint. He treated it in the same way. He writes and says: "The progress of the case was very satisfactory, but the joint anchylosed."

Dr. Thomas Fielding, of Dorset, reports the case of W. C., of intemperate habits, who fell on a scythe, cutting into the knee-joint and making a wound four inches long. The accident happened on the 1st September; the wound quite healed on the 20th; limb flexed to an angle of 45° without pain.

Correspondence.

LONDON CORRESPONDENCE.

To the Editor of the CANADA MEDICAL AND SURGICAL JOURNAL:

Many thanks for the JOURNAL, which was duly received. The inaugural address of Dr. Wright at the opening of the session was capital, and just like him. I could take in the whole scene as I read it. I am glad that the number of students is increasing. I have been attending University College Hospital and find plenty to learn, more especially in the out-patients room. In conversation with one of the physicians to the hospital the other day, the question was asked whether I purposed going up for any degree over here. I said I thought not. He replied, he thought I was quite right, as he did not believe that running after degrees was a profitable business, and he should suppose that in my own country the diploma of McGill University, from the acknowledged high standing of that institution, should carry as much weight as if I had half the degrees of the colleges of Great Britain. What is your opinion on this point? though I need hardly ask.

A man named Bates, I believe, made a bet that he would carry the "stars and stripes" from the Border to London, and through London to the Guildhall, without its being insulted. He arrived at Shepherd's Bush last Friday, and set out from there about 1 o'clock in the afternoon in a carriage, with his flag flying. The οἱ πολλοί cheered, and at the Marble Arch took the horses out of the carriage and drew it themselves down St. James

street, Pall Mall, Strand, Fleet Street, up Ludgate Hill, and so on to the Guildhall, where he furled his flag and made a short speech. In the evening he went to the Adelphi and divided the honours with the performers. The people over here seem *properly* and *becomingly* grateful to the United States for their magnanimous conduct towards them in the past, and especially their *mild* and *conciliatory* policy during the late "Alabama" and "San Juan" negotiations.

The gas stokers have struck in consequence of one of their number having been discharged. About 1,500 of them held a meeting in Trafalgar Square on the 4th instant. As a consequence gas is bad all over the city. At the underground stations it is very bad, and at some of the theatres they had almost to stop the performances.

I went to King's College Hospital the other day and saw Sir William Fergusson operate. The case was excision of the knee-joint in a man about forty years of age. He appeared very much reduced, and looked scrofulous. He had suffered from chronic enlargment of the joint for two or three years, and some time ago was attacked with acute inflammation of it. He suffered intense pain; large abscesses formed, running up the thigh, and the discharge was most profuse. The pus was unhealthy and very offensive, and Sir William said it was unusually great. *Operation:* The patient was placed under the influence of an anæsthetic. I am not sure whether it was Chloroform or Bichloride of Methylene, but it was not Sulphuric Ether. One assistant took charge of the flaps, another of the leg and foot to flex it, &c., as required, and a third had charge of the instruments. Sir William began with the usual incision across the front of the joint, from the inner to the outer condyle of the femur. He entered the joint and then dissected upward and downward, clearing the soft tissues from the bones. The patella was next removed. The limb being flexed he sawed off the end of the femur from before backwards. This he did with great care, and did not completely sever it with the saw, but completed its removal with the knife. He proceeded in the same way with the head of the tibia. Next, with forceps and scissors, he cleared both upper and lower flaps of all irregularities, as tags of fascia, synovial membrane, &c. The flaps were then brought together with interrupted sutures, strong, white linen thread, about the thickness of a light fishing line, being used for this purpose. I do not think the thread was carbolised, but it appeared to be well waxed. The leg was then placed on a slightly concave, iron, posterior splint, which was padded and furnished with a footboard, also carefully padded. Beneath the poplitral

space a soft and not too thick piece of water-proof cloth was placed. The padding used was very soft kind of wadding, in sheets $\frac{5}{8}$ of an inch thick and glazed on both sides. The leg was strapped to the splint, the skin beneath the straps being protected by soft pads of lint. The foot was bandaged lightly and securely to the footboard, the bandage been carried partly up the leg. The wound was dressed with a large piece of wadding steeped in a solution of Carbolic Acid. Over this was placed another thick fold of wadding, and then a piece of oiled silk or gutta-percha tissue and a bandage applied lightly over all. The limb was thus kept as warm as possible. After the removal of the patient Sir William made some remarks, the substance of which were as follows: He said that the case was a very bad one, as we could see; that the mortality in excision of the knee-joint was not greater than in amputation at the lower third of the thigh, and if the man should recover he would have the advantage of a useful limb. In this case the synovial membrane and cartilages were extensively diseased, but there was no disease of the bones, which was a point in the patient's favour. In cases similar to the one just operated on, where there was acute inflammation of the joint, some would say do not interfere, do not excise, because you run the risk of injuring the reputation of surgery, and also because it might be said that the surgeon had even put the finishing touch to the disease and hastened the patient's end. But he had a higher opinion of the office of surgery than that. If you could remove the disease, which you did by removing the diseased bones and other diseased structures, you did your patient good service, for you relieved him of excruciating agony, and there was a possibility of his recovering with a useful limb. In the present case the prognosis was unfavourable, as the patient was much run down in every way, but still he might pull through and live many years with two legs instead of one, as in the case of amputation, in which operation his chances were in no way improved; or, on the other hand, if the case had been left to itself, the patient would most likely have died, worn out by the torture he was continually suffering.

At the Samaritan Free Hospital I saw Mr. Spencer Wells operate for ovariotomy. A woman about 25 or 26 years of age was the subject. She was anesthetized with the Bichloride of Methylene, placed on her back with the head and shoulders slightly raised, the abdomen was covered by india-rubber cloth—thin and soft, there was an aperture in it through which the tumour projected. This sheet was gummed to the skin, along the margins of the opening. *Operation:* Mr. Wells made an incision along the linea alba, from

about an inch below the umbilicus to the pubis. He then careulfly divided the tissues down to the peritoneum, which he opened about midway in his original incision. He then divided it upwards and downwards, on a director, to the full extent of the incision. through the skin. The cyst, thus freely exposed, was tapped with a large trocar provided with a stop-cock, and india-rubber tube attached. The woman was still on her back; indeed her position was not changed throughout the operation. As the cyst emptied Mr. Wells was enabled to get his hand behind it and force it in part through the orifice, and finally, grasping it with a pair of strong forceps, he brought it entirely through. Near the pedicle some solid lumps projected from the interior of the cyst. The tumour being now wholly out of the abdomen he applied the clamp to the pedicle, which was long and broad, and then severed the mass from its root, about an inch above the clamp. There was no hæmorrhage, and there were no adhesions. He then stitched up the wound, which he did with seven interrupted sutures, silver wire being used. All the sutures were inserted through the peritoneum and overlying tissues. Each suture was held aside till all were inserted, when they were tied, beginning from above downwards. The assistant made the sutures much neater by inserting a steel probe, about the diameter of a goose-quill and flattened on one side, between the opposed edges of the skin, as Mr. Wells brought them together, and pressing down the fat fascia, &c., out of the way, so that a very clean suture was the result. The skin near the clamp was protected by pads of lint, and the cut end of the pedicle treated with some caustic which I took for potassa fusa. Pads of lint were then laid over the wound and the belly was covered with a pad of cotton wool, the whole being retained *in situ* by broad straps of adhesive plaster which overlapped and thus strongly supported the abdominal walls. Over the whole was then applied a laced flannel binder, broad enough to reach from the ensiform cartilage to below the pubis. The patient was then placed in a warm bed, in the same room, and covered up. Mr. Wells made no remarks on this case.

I have just returned from St. George's Hospital, where I saw Mr. Pollock operate for vesico-vaginal fistula, and also remove an exostosis from the tibia. Mr. Holmes also performed an operation for abscess of the vulva, and Mr. Rouse for extroversion of the bladder in a girl about 11 years old.

I have seen the Nitrate of Amyl given here with, at any rate, temporary benefit in cases of neuralgia and spasmodic asthma. It is said to be especially good in angina pectoris. I have seen it used by inhalation. It is also given internally, I believe.

I do not know if I before mentioned a case of excision of the tongue by Mr. Erichsen. It was for epithelial cancer. In performing the operation the tongue was drawn forwards, and its attachments along the floor of the mouth divided by scissors. The mucous membrane was slit up on both sides. The tongue was then drawn still further forwards and the ecraseur applied. The tongue was taken off by the galvanic cautery. During this part of the operation not a drop of blood flowed. Mr. Erichsen said that in severing parts with the galvanic cautery the wire should not be too hot, as in that case the vessels were cut through too rapidly and did not get sufficiently plugged. A dull red heat was about the proper thing.

Now, I do not know whether you will thank me for these rambling notes of operations in which you probably see nothing new; still, they were of interest to me, and I trust if you consider them worth insertion in your journal they will be of equal interest to your readers.

A. A. B.

London, 10th December, 1872.

Hospital Reports.

Medical and Surgical Cases Occurring in the Practice of the Montreal General Hospital.

Compound Fracture of Tibia Resulting in Spreading Gangrene—Amputation—Recovery. Under the charge of Dr. Fenwick. Reported by Mr. William Ewing.

J. H., aged 17, admitted into hospital October 24th, suffering from a severe wound two inches long and three-quarters of an inch broad, situated on the posterior aspect of the leg, about midway between the heel and knee. On examination, the upper fractured end of the tibia was found to protrude for about an inch of its extent. A large portion of muscle was also found protruding. The patient was put under the influence of chloroform, but several attempts to reduce the fracture having proved unsuccessful, three-quarters of an inch was snipped off the fractured end with the bone forceps. The tibia appeared to be driven completely through the interosseous space. The fibula was not broken. The wound was injected with carbolic lotion 1 x 40. A compress and side splint were applied.

October 24, 10 p.m.—Patient restless; pulse 100, and considerable pain in the part. Solution Morphia, M. 40, was given.

October 25, 9 a.m.—Patient did not rest well during the night; pulse 124; tongue clean now; inclines to sleep. Liq. Ammon. Act., ʒij., every three hours was ordered.

October 26, 9 a.m.—Pulse 120; temperature 100 2-5° ; restless; the limb was left undisturbed; not much pain. 7 p.m., very restless; splint was removed; the limb was found in an emphysematous condition in the vicinity of the opening; there was considerable odour given off from the wound. It was injected with Lotio Carb, 1 x 20, and a hot linseed meal poultice applied. Pulv. Opii, grs. j., was given every four hours. 10 p.m., pulse 119; temperature 101 1-5° ; respirations 32; patient very restless.

October 27, 10 a.m.—Pulse 108; temperature 100 4-5; foot cold; blebs found over lower and inner side of the leg, and emphysematous as high as the knee. About 3 p.m. a consultation was held; pulse found full and strong, and gangrene extending as high up as the knee. Immediate amputation was determined upon.

The lateral flap operation was performed by Dr. Fenwick, with a remarkably small loss of blood. The thigh was amputated at about its lower third.

The amputated leg, on examination, presented the following appearances: The nerve (post tibial), at the seat of the injury, was found congested and half torn through; the vein and artery were uninjured. At seat of injury the upper part of the tibia was found posterior to and riding over the lower part. The bone was splintered and split down for some distance. The periosteum peeled off both the tibia and fibula up as high as the knee. After the operation the patient felt quite well. Pulse 102.

October 28.—Patient rested well during the previous night; temperature normal; pulse full and strong.

October 29.—Patient doing well; enjoying good rest at night.

October 30, 31, and November 1.—Steady improvement noticed at each visit; pulse and temperature normal; patient taking brandy and nourishing diet. He was ordered Quinæ. Sulph., grs. xij., Tinct. Ferri Mur. ʒij., Aqua ad. ℥vj. Tablespoonful three times a day. The patient has continued to progress favorably, and at the time of closing this report, 17th December, the stump has quite healed; the boy sits up in the ward every day; he is still pale, but his appetite is good and he is rapidly gaining strength.

Compound Comminuted Fracture of the Elbow-joint with Extensive Laceration of the Soft Parts—Amputation—Recovery. Under the care of G. E. Fenwick, M.D. Reported by Mr. D. O. Alguire.

Amable P., aged 18, sailor, was admitted into the Montreal General Hospital on the 9th October, 1872, suffering from extensive injury to the left elbow-joint, produced by the bursting of a cannon on board a steamship while sailing up the river. It appears that this man was lying in his bunk when the accident occurred, and he was struck on the back of the left elbow-joint, but whether by a fragment of the cannon or a splinter from the deck does not appear. The accident had occurred several hours before his admission and the man had not wholly recovered from the shock.

On examination the following condition was observed: A large lacerated wound was found on the outer side of the arm, extending from about three inches above the elbow-joint downwards to four inches below the olecranon process. The integument was rolled back and the soft parts reduced to a pulpy condition; the joint was open; the external condyle fractured; the entire articulating facet for the head of the radius was separated and thrown forward: the head of the radius was dislocated, thrown forwards, and rested on the point of the coronoid process of the ulna; the radius itself was fractured just below its tubercle, and the fragments separated: there was also fracture of the outer angle of the olecranon process; there was little or no hæmorrhage; indeed it was stated that the man had, at the time of the injury, lost comparatively little blood; the arteries appeared uninjured; the radial pulse was quite distinct, as full, indeed, as that in the uninjured arm; the musculo-spiral nerve, just where it emerges at the bend of the elbow, was laid bare for about two inches of its extent. From the extensive crushing of the soft parts and injury of the joint it was thought advisable to amputate the arm. This operation was at once performed by the circular method, the limb being removed about the middle third of the arm, above the seat of the injury, and in apparently uninjured tissue. The muscles, when divided, appeared somewhat infiltrated, and the supinator longus and external head of the triceps muscles were detached from the humerus. This necessitated sawing the bone higher up than was at first contemplated, as at certain points it was found denuded of periosteum. Three ligatures were applied, the edges of the skin were brought together by four sutures. A piece of lint saturated with carbolic acid lotion—1 to 40—applied; this was covered with gutta percha tissue, and a roller to support

the dressings in position. There appeared to be a superabundance of skin, the flap being longer than it otherwise would have been, due to the removal of an extra slice of bone. Dr. Fenwick stated that he had seldom removed an arm with more regret than on the present occasion. The injury appeared at first sight to be of that nature which admitted of putting in practice the rules of conservative surgery, but on a more careful inspection of the parts he found that nothing but amputation gave the patient a chance of life. Everything progressed favorably until the 15th, when the patient had a rigor, was hot, feverish, with accelerated pulse and furred tongue; the stump was painful and had an erysipelatous blush; two sutures were removod, when some pus and shreds of dead cellular tissue flowed away; a small circumscribed slough formed on the lower flap which in due course separated, leaving healthy granulations beneath; the wound closed kindly; the patient rapidly improved, and was enabled to leave the hospital on the 9th November, just one month from the date of his admission.

Case of Charbon or Malignant Pustule—Recovery. Under the care of Dr. Fenwick, Attending Surgeon to the Montreal General Hospital. Reported by T. G. Roddick, M.D., House Surgeon Montreal General Hospital.

F. Fox, aged 56, came to the hospital on the 18th November, asking admission. He appeared a prematurely old man, being much stooped and very gray. He presented a somewhat hideous appearance, from the fact that the entire lower lip, from the chin below to the edge of the lip above, and extending on the left side far into the cheek, was swollen to five times its natural size and black in color, as though it had been charred; the tissues, for some distance on all sides, were infiltrated, indurated, and brawny. He said that up to three days before he presented himself he had been working in a part of the canal known as Douglas's Basin, where it is the custom to deposit dead animals or offal of the more bulky kind. He first noticed a little pimple, to the left of the middle line, on his lower lip, which was itchy, but on the slightest irritation became intensely painful and annoying. In twenty-four hours from the time it was first noticed it had reached the size of a twenty-five cent piece, until, on admission, it had gained the proportions I have mentioned. He looked haggard and was so weak when he reached his bed as to be unable to get into it without assistance; pulse, 140; temperature, 102 1-5; respirations, 40, and laboured; extremities cold;

countenance livid; there was extensive œdema of the entire cellular tissue of the neck, extending down to the fourth rib, and over the left shoulder into the arm: the eyelids were also puffy and almost closed; judging from his speech and breathing there was evidently slight œdema of the glottis, and the tongue was also swollen. He was immediately ordered, internally, the following: Tinct. Ferri Mur., ʒss; Quinæ Sulph., gr. ij.; to be given in water every four hours; in addition, eight ounces of whiskey and two pints of beef-juice were ordered to be given in twelve hours; to the lip was applied, on lint, a solution of one to five of carbolic acid, and poultices of linseed to the œdematous chest. At night the eight ounces of whiskey and two pints of beef-tea were repeated, and at 9 o'clock on the morning of the 19th November, or the day following his admission, his pulse had fallen thirty beats, (110); temperature, 100 1-5; respirations less frequent and labored, and he expressed himself as much more comfortable in every respect; the inflammatory thickening about the diseased part had subsided to a considerable extent, being confined to about an inch on either side.

November 21st., at noon.—The treatment described as being practised every twelve hours has been scrupulously adhered to, and the symptoms have abated with marvellous rapidity. There is no longer any œdema of the cellular tissue of the chest or puffiness of the eyelid, and the induration surrounding the diseased portion has entirely disappeared. His pulse is 84; temperature, 98 3-5; respirations normal and tranquil. The temperature taken on three different occasions during the past twenty-four hours has never been higher than 99°. He expresses himself free from all pain and uneasiness, and says if his lip were well he could leave the hospital. The lip is less swollen, but is still black and gangrenous looking, although very painful to the touch. Instead of the lotion used hitherto, poultices of linseed meal containing carbolic acid were substituted. Before applying the latter, however, Dr. Fenwick made two incisions, in a longitudinal direction, through the lip, which exposed healthy tissue beneath and bled freely. During the past seventy-five hours—since his admission—the man has consumed over two pints imperial of whiskey, and to that in very great part must, I think, be attributed his marvellously rapid recovery. With the exception of the sleep it induced (as he had no hypnotic) I could never satisfy myself that he was affected by the stimulant, as he would undoubtedly have been in health. He was, I had forgotten to mention, a temperate man, seldom indulging in more than a couple of glasses of ale in the day. The sudden fall of the temperature was one of the most

remarkable features of the case, and could likewise be attributed, in a great measure, to the stimulant, as we so often see in fever. After the third day the amount of whiskey was diminished to six ounces in the twenty-four hours, as also the quantities of iron and quinine in the mixture. His tongue was comparatively clean throughout, but constantly dry, from the fact that he was unable to close his mouth. The slough separated at the end of ten days, and the wound rapidly healed under red wash and water dressings alternately applied. There is little if any deformity remaining.

Case of Purpura (Simplex). Under the care of Dr. WRIGHT. Reported by Dr. Chipman, Assistant-House-Surgeon Montreal General Hospital.

M. G., aged 19, a native of Scotland, was admitted into the Montreal General Hospital on the 13th November, 1872, complaining of rheumatic pains in the knee-joints, and down the calves of the legs, and the ankles. He is very tall for his age, being over six feet, but pretty well built; he says he grew very rapidly from the age of fourteen until he was eighteen years of age; he has dark hair, and is rather pale, and not very stout; before he emigrated to this country he had been employed as a farm laborer; for a year past he has been engaged as a deck hand on one of the lake boats; he had been in the city about three months when he came to hospital; he says he has suffered no privations, and has always had plenty of good food; his general health has been excellent, and he has had no severe illness since childhood.

Present Condition.—Pupils large; tongue slightly furred; bowels open once a day; appetite good; no cough or any abnormal condition of the respiratory system; pulse quiet; the pains in the legs of which he complained had troubled him for five days past.

On examination a thickly-spread eruption of small purple spots (in size varying from a pin's head to a split pea) was found on both thighs; this, he said, had first made its appearance about seven days ago; he said that he had no epistaxis or any other hæmorrhage; the gums were not spongy; he has hæmorrhoids, but they do not bleed. He was put on full diet and ordered the followingmixture:

℞ Ol. Terebinth, ʒvj.
Tr. Aurant, ℥iss.
Ol. Cinnamon, mx.
Alb. Ovi.
Mist. Acac ad, ℥viii.

A dessertspoonful to be taken every four hours.

14th.—The pains still continue in the legs, but are not so severe; the rash is fading; it is of a brownish color to-day.

15th.—The rash is of a pale, greenish-yellow color to-day; tongue cleaner; did not sleep very well last night on account of some headache.

16th.—The rash has disappeared.

18th.—To-day a fresh rash, similar in character and of a decided purple color, and much more profuse than the first, (extending all over both extremities, and symmetrically distributed,) made its appearance.

20th.—A rash appeared on the forearms this morning, also symmetrically distributed.

21st.—The eruption is paler this morning; the former mixture was stopped, and he was ordered Plumb Acet., grs. v., ter die., and Raspberry Vinegar as a drink.

22nd.—The eruption is gradually disappearing; complains of slight headache.

23rd.—Most of the eruption has disappeared; a few apparently fresh spots are noticed on the legs and at the bend of the elbow.

24th.—A fresh eruption made its appearance to-day, most marked on the calves of the legs.

25th.—The eruption is beginning to fade; the pupils are still large; tongue clean, and bowels act once a day in spite of the acetate of lead; the quantity of urine is normal; complains of some pain in the left knee.

28th.—Eruption entirely disappeared; the acetate of lead was stopped, and he was ordered instead the following:

℞ Magnes Sulph., ℥j.
Ferri Sulph., grs. xxxii.
Quin. Desulph, grs. xx.
Acid. Sulph. Aromatic, ʒj.
Aquæ ad, ℥viii.
℥ss. ter in die.

Dec. 1st.—A few fresh spots noticed on thighs, but not as bright as formerly.

4th.—The spots have disappeared.

From this date no fresh eruption came out up to the time of his leaving the hospital.

Dec. 9th.—Left the hospital to-day cured.

Case of Tertian Ague, originating in Montreal. Under the care of Dr. Wright. Reported by Dr. Chipman, Assistant-House-Surgeon Montreal General Hospital.

T. K., aged 47, a native of Ireland, was admitted into the Montreal General Hospital on the 25th November, suffering, as he said,

with chills and fever. He is a spare man man, of medium height and of a pale and sallow complexion; he has resided in Montreal for three years past, in St. Patrick street, Point St. Charles; he came direct to this city from London, England, where he had been twenty seven years engaged in a sugar refinery; he has never been out of the city since his arrival; he is a widower; his general health, up to the present time, has always been excellent, and he is temperate and regular in his habits; he believes he has lost about twenty pounds since his present illness commenced; about five weeks ago he commenced to feel unwell, and complained of chilliness and pains in his legs; this feeling lasted about a fortnight, and he felt unable to do any work; at the end of this time —one day between 1 and 2 o'clock—he was seized with a severe chill, with which he went to bed; the shake, he says, lasted nearly three hours, and was followed by a hot stage lasting about an hour and a half, and this by a sweating stage of three-quarters of an hour; since then he has had a chill every second day; he has several times bought quinine at the druggists and taken it, but without effect.

On admission he complained of weakness and loss of appetite; tongue slightly furred at sides and red at tip; pulse 64, regular.

26th.—When making the visit to-day it was found that he had had a chill, which commenced about 11 o'clock; he was just commencing to sweat at the hour of visit—12:30. Dr. Wright ordered Chloral ʒss. to be given before the next expected paroxysm.

28th.—He commenced to shake about 10 o'clock this morning, shortly after he had taken the Chloral, the chill lasting till about 11; when seen at 11:10 he was in the hot stage; respirations, 36; pulse, 120; temperature, 105 3-5; at this time of the visit he was sweating profusely. He was ordered Chloral ℈ii, to be taken about an hour before next expected paroxysm; in the evening his pulse was 64; temperature normal.

30th.—This morning about 10, in spite of the chloral, the chill came on, and I saw him in the cold stage; he was all covered up in bed, and shaking very much; respirations, 32; pulse, 100; temperature, 101 2-5; the chill lasted about half an hour, and at the hour of visit he was again in the sweating stage. Ordered Chloral ʒj before next paroxysm.

Dec. 2nd, 9:20 a.m.—Has taken the chloral; respirations, 16; pulse, 80; temperature, 98 2-5. 10.20, just commenced to shake, the chill lasting nearly an hour. 11:30, in the hot stage; respirations, 38; pulse, 114; temperature, 104 1-5. 12:30, not quite over the sweating stage; temperature, 104 4-5. Was ordered Ferri et Strychinæ Citratis, grs. ii, ter in die.

Dec. 4th.—Commenced to shake at 9:20, sweating profusely at 12:30.

He had last shake on Friday the 6th instant; the Iron and Strychnine was increased to four grains three times a day.

Dec. 15th.—Had no shake last week; had a slight chill about 1:30 to-day, lasting about ten minutes; was sweating about 2:30, and over at 3 p.m.

18th.—He says he sweats a great deal every night now, but has had no regular chill since Sunday; his color is somewhat better, and his appetite is improving.

Case of Bright's Disease—Death—Autopsy. Under the care of George Ross, A.M., M.D. Reported by Mr. J. C. Cameron.

H. S., was admitted to the Montreal General Hospital on 31st August, in the following condition: Has always been a very intemperate woman, and, to use her own expression, "worked hard and drank harder;" has frequently undergone a great deal of hardship and exposure, being naturally of a strong constitution; had been in hospital for some little time last year, suffering from anasarca, and was discharged much improved.

She states that she has suffered some days with great swelling of the legs, the pains and œdema becoming rapidly worse; some difficulty, too, was experienced in breathing; has been ailing only a short time before entering hospital—probably four or five days. She complained, on entering, of great tenderness of surface, œdema of the lower extremities, and general debility; her temperature is about normal; bowels regular; respirations very labored, with an intolerable feeling of suffocation; circulation very feeble; pulse, at times, rapid and fluttering; urine small in amount and pale, with a heavy sediment, literally full of albumen, and under the microscope found to be crowded with pus-cells; her general appearance is one of œdema, the peculiar watery conjunctivæ being particularly well marked; there existed a very decided erysipelatous condition of the lower extremities, with intense pain upon the slightest pressure, but somewhat less severe when the pressure was firm and deep; this condition was observed below the knees only, and in the right more than in the left leg; sleeps nearly all the time, but is frequently aroused by the difficulty she finds in breathing. Was ordered the following: Tr. Ferri Mur., mxv. Liq. Ammon. Acet., ʒj. Acid. Acet, q.s. Aquæ ad, ʒss.

This draught was ordered to be repeated every six hours.

Five incisions were made in the legs, which gave great relief; the blood which escaped was thin and contained a large amount

of serum; she gradually sank, however, the dyspnœa becoming worse; delirium supervened, and she died on the 7th of September, having been one week in hospital.

AUTOPSY TWENTY-NINE HOURS AFTER DEATH.

Considerable effusion into pleural cavity.

Lungs.—Extensive adhesions from old pleurisy; both lungs very œdematous, more especially the left; extensive puckering of the apex of the right lung, not so marked in the left lung; the lower four-fifths of the upper lobe of the left lung quite solid, containing a semi-purulent fluid in large quantity, showing the existence of a severe and rapid pneumonia; the apex, however, was quite crepitant.

Heart.—Normal.

Spleen.—Very small, congested, with a large white pucker or scar on its outer margin.

Liver.—Small, peculiar in shape, its transverse diameter being much lengthened.

Kidneys.—Large and heavy, weighing seven ounces each; very firm and tough; pyramids few, pale, irregular, and scattered; cortical portion almost obliterated, the whole kidney resembling, when cut, a piece of very fat bacon, with here and there a slight trace of lean; capsule somewhat adherent, tearing off with it portions of the substance of the kidney, and leaving behind a decidedly granular appearance, with an occasional small cyst.

Bladder.—The internal surface covered with irregular red patches and presenting a peculiar, mottled, greyish appearance; evidently extensive inflammation had been present, which accounted for the pus discovered in the urine.

Gall-stones.—Eighty of them were extracted, one being of a very peculiar shape, as large as a hickory nut, with the corners rounded and curved upon the body, very much like the flange of the screw of a steamer.

Proceedings of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held 30th November, 1872.

This evening was held the regular meeting of this Society, in their rooms, University street, the Vice-President, Dr. Reddy, in the chair.

The minutes of the last meeting were read and approved. After the transaction of routine business Dr. F. W. Campbell read a

paper on a case of Tertian Ague, which was of local origin. The subject of the attack was born in Montreal and had never resided out of the city. There was nothing of special interest in the case except the fact of its occurring in an individual who had never been absent from Montreal. The immediate cause of the attack appeared to be exposure to cold, it having followed a bath in the Lachine canal early in the month of June. The disease yielded to full doses of quinine administered an hour before the expected paroxysm.

Dr. Scott observed that in his experience intermittent fever of local origin was extremely rare. Thirty years ago cases were occasionally seen in quarters of the city which were badly drained. He had seen cases of purely local origin below the line of Côte à Baron, but at that time there was a large swamp extending for a considerable distance eastward. Within the last few years, however, a tunnel had been made through that swamp and, as a consequence, the locality was in a far better sanitary condition.

Dr. Robillard stated that during the past year he had seen a case of ague in a young lad who, at that time, resided in Victoria street, which is a new street, opened only during the past five or six years. It is true that the boy had been with his family during the summer months at one of the villages on the lower St. Lawrence.

Dr. Roddick stated that there was a case of ague under treatment at present in the Montreal General Hospital, under the medical charge of Dr. Wright. Perhaps Dr. Chipman, the Assistant-House-Surgeon, would mention the prominent features of the case.

Dr. Chipman gave a *résumé* of the case up to this period. (A report of this case will be found under the heading of Hospital Reports in the present number of the JOURNAL.)

Dr. Hingston said that ague, in his experience, was extremely rare. Drake, in his work on the "Diseases of the Central Valley of North America," states that no cases of ague of local origin have been observed east of the village of Lachine. He could not state how this information had been obtained, but he was under the impression that it was erroneous. In fact, last year he had seen two cases of undoubted ague, in a family, who reside a mile or so, North East of the city, near the quarries at Petite Côte, and in conversation with Dr. Howard on the subject he said that he had seen cases of ague in the vicinity of Chambly. After the American War he admitted into his hospital many cases of ague in discharged soldiers, he was in the habit of treating ague with large doses of Quinine, sometimes as much as thirty grains given

an hour before the expected attack and seldom less than twenty.

Dr. McEwan, of Carleton Place, Ontario, stated that he had met with many cases of ague in a district in which he formerly practised, near London. In the immediate vicinity of his residence the country was dry, but there were swamps in the neighborhood. He had noticed the disease occurring at all seasons of the year; in early spring, as during the summer, and in the autumn. In respect to treatment he found that moderate doses of quinine, from six to ten grains, given before the expected paroxysm, would cut short the disease. He had never required to give those heroic doses spoken of, as twenty or thirty grains of quinine. He had tried cinchonine, but it was not satisfactory, and required to be given in very large doses.

Dr. George A. Baynes then read a paper on a case of wound of the knee-joint, in which the joint had been laid open by a fall upon a scythe. (This paper will be found amongst the original matter of the present number of the JOURNAL.)

Dr. Hingston believed that joints would in some instances suffer injury and be freely opened without permanent impairment of their functions. He had been in the habit, for some years past, of tapping joints even in the acutely inflamed state, and he did not consider it a matter of such great importance, the exclusion of air. He had tapped the knee-joint in acute synovitis, in some cases where he felt convinced air had entered the joint, no evil results followed. He did not consider it necessary in such cases to employ antiseptic dressings, as he believed that rest, good air, and general sanitary arrangements, with scrupulous cleanliness, were sufficient.

The Chairman thought that the aspirator would be a very fitting instrument to employ in such cases, when the amount of fluid was so considerable as to injuriously press upon and stretch the tissues of the joint. It would answer every purpose if the object was to remove tension. That object would be fully attained by the use of Bowditch's aspirator as by the more heroic method, and to his mind more dangerous method of plunging in an ordinary trochar. He should like to hear Dr. Fenwick's opinion on this point.

Dr. Fenwick remarked that he had no opinion to offer. He never had tapped a joint acutely inflamed, nor did he think he could be induced to do so, as he found that other methods of treatment less heroic, but, in his opinion, more safe, answered the purpose very well.

Dr. Baynes remarked that in saying he had treated the case antiseptically he was in error, that is, he had not adopted the method of Mr. Lister; he had merely washed out the wound, and

syringed out the joint with a solution of carbolic acid, and then brought the edges of the wound together, preserving perfect rest to the joint by a back splint. The patient was able to leave his bed about the fourteenth day after the accident.

The Society then adjourned.

Reviews and Notices of Books.

Galvano-Therapeutics; the Physiological and Therapeutical Action of the Galvanic Current upon the Acoustic, Optic, Sympathetic, and Pneumogastric Nerves. By William B. Neftel, M.D. New York: D. Appleton & Co. 1871.

This little volume of one hundred and sixty pages, elegantly bound, is the forerunner of an extensive treatise, in two volumes, about to be published, on the diseases of the nervous system and the galvanic current in its relation to physiology, medicine, and surgery. Dr. Neftel was, in 1852, awarded the prize of the Imperial Medico-Chirurgical Academy of St. Petersburg, for an essay on the "Diagnosis of Diseases of the Nervous Centres," and appears to have always taken the deepest interest in diseases of the nervous system.

The article on Electro-Otiatrics was first read before the New York Medical Journal Association in 1870, and appears to be exhaustive of the subject. The author is not, however, as clear as he might be in the descriptions of his apparatus, taking it too much for granted that his readers are all electricians. The acoustic sensations produced by the galvanic current are very various in different individuals in a state of health. Thus some experience a clear, high, sharp metallic sound, sometimes of a pleasant and distinctly musical character, like the ringing of a bell, the sound of a stretched cord, as of a guitar or other stringed instrument; the sound of a glass, or of vibrating metallic plates. Sometimes the sensation produced is that of a murmur; it may be like the distant explosion of a cannon, the rolling of a heavy vehicle, or whistling, hissing, buzzing, and many other noises. The lower current intensities usually call forth murmurs, the higher intensities musical sounds. The acoustic reaction appears to be called forth not only by the closing and breaking of the current, but also by sudden and large fluctuations during the uninterrupted flow of the current. Fluctuations with increasing intensity have

the same effect as the closing, and fluctuations with diminishing intensity the same as the opening of the current. Dr. Neftel warns operators against these causes, either in the nervous apparatus itself or in the conducting structures of the auditory organ, which are apt to modify the results of their treatment; such, for example, as accumulations of hardened ear-wax, deposits of morbid products, adhesions of the walls of the meatus, &c. Those cases which seem to be most benefitted by the galvanic treatment are simple hyperæsthesia and torpor of the nerve, tinnitus, aurium, catarrh of the middle ear, facial paralysis with deafness, &c.

The author illustrates the action of the galvanic current on the sympathetic nerve with a number of cases of various diseases where ordinary medical treatment has proved unavailing. The thoracic and abdominal ganglia are recommended to be galvanized by applying one electrode to the inferior cervical ganglion and the other to the sides of the lumbar vertebræ. Galvanization of the splanchnic nerves is recommended in certain forms of epilepsy where the aura, which invariably precedes every attack, is situated in the epigastric region. Dr. Neftel attempts to explain the origin of the epileptic attacks and the beneficial effect of galvanization of the splanchnic nerves in the following manner: "From some unknown cause, all the visceral vessels under the command of the splanchnic nerves suddenly become dilated and filled with blood, which causes complete anæmia of the brain, as indicated by the pallor of the face and the whole body, which calls forth epileptic convulsions. In this particular case I galvanize the splanchnic in the reverse manner to the one which, as experience has taught me, produces general anæmia, and thus prevent the epileptic attacks." Dysmenorrhœa, irritable uterus, irritable testes, asthma, whooping cough, angina pectoris, and the various forms of hyperæsthesia are recommended to be treated by stimulating and giving tone to the sympathetic system by means of galvanism.

We heartily recommend the perusal of this little work to those especially interested in the subject, and shall await with anxiety the publication of Dr. Neftel's more voluminous work on the same branch of medical science.

Handy-book of the Treatment of Women's and Children's Diseases, according to the Vienna Medical School, with Prescriptions. By Dr. Emil Dilluberger. Translated from the second German edition by Patrick Nicol, M.B. Philadelphia: Lindsay & Blakiston. 1871.

Here something of greater or less importance is said of all the ills to which the flesh of women and children is heir, with an

immense variety of prescriptions for their amelioration and cure. The Austrian treatment of these cases appears to be identical with that practised by British practitioners; but to judge from the length of some of the prescriptions recommended by Dr. Dilluberger, Austrian mothers and their offspring are to be pitied if sickness should happen to overtake them in their own country. In severe cases of *croup* the author recommends cold effusion along the spine, and musk and assafœtida, in large doses, in the stage of collapse. *Hydrocele* in children is recommended to be treated radically by Linhardt's plan, which consists in the subcutaneous division of the prolongation of the tunical sac with a fine tenotomy knife, with concave-cutting edge, in the following manner: A fold of the scrotum being raised up, a finely pointed tenotomy knife is inserted, carried on flatwise for some distance between the skin of the scrotum and the serous sac, and then an incision, one to one and a half inch long, is made with the tenotome. Soon œdema of the scrotum comes on, which, however, quickly passes off, and the processus vaginalis closes. In *syphilis neonatorum* corrosive sublimate baths are used with marked effect by some Austrian practitioners. In the treatment of the diseases of women the work contains nothing worthy of special mention.

Mr. Nicol, the translator, adds a few notes on British practice, for which there is, however, really no necessity, as the original comprises all the different modes of treatment practised in England at the present day.

The book, which contains over two hundred pages of reading matter, is neatly got up, and, from its size, can be carried about, for the sake of reference, without inconvenience. It is very well adapted for country practitioners, who are often so far away from their libraries.

Meteorology and its Professors. Respectfully dedicated to all whom it may concern, by their obedient servant, Thos. D King.

We have received a pamphlet with the above heading. It is an exceedingly well written and pungent article, being chiefly strictures on the Montreal Observatory and its Director. We have not seen any published refutation of the charges contained in this pamphlet: charges of a very damaging character, touching the accuracy of the published observations of the Director of the Montreal Observatory. We trust that the charges are not unanswerable. Certainly, if the allegations are true, and we have no means of deciding the points at issue, then, indeed, are the obser

vations which are published worthless as a scientific record of the Meteorology of Montreal. The writer says, "It is difficult to understand why the study of the air, weather, and seasons, with the varied and interesting appearances which they present, has not received greater attention from educated persons, more particularly from those who are interested in agriculture and shipping." We might also add, from those interested in connecting the occurrence of disease, either endemic or epidemic, with climatic changes. He goes on to say that one reason for the little notice given to Meteorology in Montreal may arise from the fact that the Professor of Meteorology in McGill University has not given to the pupils of that institution "popular lectures on a science as necessary as natural history, geology, and astronomy: teaching them on 'the balancings of the clouds' mentioned in Holy Writ as a part of the wondrous works of Him who is perfect in knowledge." Of this we are unable to say whether or not a course of instruction in the science of Meteorology forms a part of the Arts course of McGill University. If it does not, then do we think it is needless having attached a Professor of that branch. If it does, and that regular lectures are given to the students of the University, it would be as well for the statement above quoted to be contradicted under authority.

The author calls in question the accuracy of the observations made at the Montreal Observatory, more especially of the maxima and minima thermometric records. It has been to many a matter of surprise the amount of heat and cold registered at the Montreal Observatory, generally several degrees over or under those of other observers. This has always been put down to instrumental error, but whether on the part of the instruments used at the Montreal Observatory or of those used by the amateur was not determined. The author of this pamphlet, however, was not satisfied with the accuracy of these published statements and he determined to test them. He says that he took, for four months, hourly observations between 7 a.m. and 9 p.m. These observations were made with standard instruments, supplied from the Kew Observatory. Several sets of thermometers and hygrometers were so placed as to be protected from all sources of radiation, and yet discrepancies were continually occurring between his readings and the published records of the Montreal Observatory. He says: "For instance, to show that these thermometric discrepancies, or differences, or disagreements, or errors, or whatever name may be adopted for the nonce, are not due altogether to instrumental errors, whenever the days were very cloudy, or overcast, or hazy, or foggy, the recorded and published temperatures of the Director

and the writer were alike—or, at least, within a small fraction—sometimes absolutely the same; but, let the sun shine, and that very brightly, from 2 to 4 p.m., then the Director's maxima temperatures were in excess of the writer's by 2, 3, 4, 5 and even 6 degrees; therefore, in all charity he is forced to the conclusion that the instruments in use at the "Montreal Observatory" are improperly placed, or that the recorded observations are misrepresented. To accept the published records of the Director he cannot; they are in such direct opposition to possibilities that he is compelled to characterize them as either anomalous or incorrect."

The situation of the Observatory is next commented on, and we must admit that in our opinion it is badly placed. As to being able to procure the force or direction of the wind, the thing is impossible from the present site. We have ourselves seen what sailors term a "half gale" blowing in rear of the mountain, and on driving along Sherbrooke street the cups of the anemometer at the Montreal Observatory have been at a stand still. But not only is the character and accuracy of the observations and the fitness of the locality of the Observatory called in question, but the very instruments are declared to be of improper quality, as the writer observes: "If it is desirable to attain a thorough knowledge of laws, as yet unknown, that govern the motions of the atmosphere, and what may be termed the strange caprices of the weather, and to further the great Meteorological service," &c., &c., "the Montreal Observatory must, then, be placed immediately upon another basis, in order to make the organization of the Meteorological service such as to admit of the pre-announcement of storms and the adoption of an uniform system of observation." If the Observatory is wrongly placed, and no man can say it is unexceptionable in that particular, then, in the name of common sense, let the site be changed. Personally we always regarded it a mistake to erect the building in the present location.

One other question we will notice, one of great moment to the maritime interests of Montreal. We allude to the dropping of the time ball at the wharf, near the Custom House, at the hour of noon, mean time. The writer says, speaking of the accuracy of the performance of this service, * * * "the time ball on the wharf, near the Custom House, was dropped, under the supervision of the Director, within one minute, two minutes, and sometimes three minutes of the mean time,—perhaps to some not a matter of moment." In respect to this statement we believe it to be true, as recently, while in conversation with one of the officers of one of Messrs. Allan's steamships, we were told that if a ship master rated his chronometer by the dropping of the time ball in

Montreal harbour he would be put out of his reckoning from fifty to one hundred miles, and that this fact was known to every mariner who entered the port. This is a most serious matter, and one which might be followed by disaster, loss of life, and property. It only illustrates more forcibly than words can express the necessity for individuals to confine themselves to occupations with which they are familiar, and not attempt too much, by which they may seriously mislead others and bring upon themselves disgrace and ridicule; and furthermore, if the Government of the country considers that these observations are worth recording, or wish to carry out an international system of observation, then let it be done in no spirit of parsimony. Scientific observations require scientific observers, and if the country demands observations which are admitted to be useful—nay, even indispensable—then they must be paid for; but we think it is much to be deplored that apparent deserved obloquy should be thrown on this particular branch of the service of our country, and that chiefly because the country will not pay for having the service efficiently done.

BOOKS RECEIVED FOR REVIEW.

The Pathology, Diagnosis, and Treatment of Diseases of Women, including the Diagnosis of Pregnancy. By GRAILY HEWITT, M.D., Lond., F.R.C.P., Professor of Midwifery and Diseases of Women University College, and Obstetric Physician to the Hospital, &c., &c., &c. Second American from the third London edition. Revised and Enlarged, with One Hundred and Thirty-two Illustrations. 8vo; pp. 751. Philadelphia: Lindsay & Blakiston. 1872.

A Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits. Illustrated by numerous Cases and Engravings. By WILLIAM ROBERTS, M.D., Fellow of the Royal College of Physicians, London; Physician to the Manchester Royal Infirmary; Lecturer on Medicine in the Manchester School of Medicine. Second American from the second Revised and considerably improved London edition. 8vo; pp. 616. Philadelphia: Henry C. Lea. 1872.

Surgical Diseases of Infants and Children. By M. P. GUERSANT, Honorary Surgeon of the Hôpital des Enfants Malades, Paris; Honorary Member of the Société de Chirurgie, etc. Translated from the French by Richard J. Dunglison, M.D. 8vo.; pp. 354. Philadelphia: Henry C. Lea. 1873.

Obstetric Aphorisms for the Use of Students Commencing Midwifery Practice. By Joseph G. Swayne, M.D., Physician Accoucher to the Bristol General Hospital, &c., &c. Second American from the fifth Revised English edition, with additions by Edward R. Hutchins, M.D. 8vo.: pp. 189. Philadelphia: Henry C. Lea. 1873.

Wöhler's Outlines of Organic Chemistry. By Rudolph Fittig, Ph.D., Nat.Sc.D., Professor of Chemistry in the University of Tübingen. Translated from the eighth German edition, with additions by Ira Remsen, M.D., Ph.D., Professor of Chemistry and Physics in Williams College, Massachusetts. 8vo.; pp. 530. Philadelphia: Henry C. Lea. 1873.

HYDROPNEUMOTHORAX.

Sir Henry Thompson, M.D., F.R.C.S. (*British Medical Journal*, Oct. 5, 1872), in a clinical lecture on this rare disease, stated that he had been induced to modify some of the opinions formerly expressed by him. He was of the opinion, whatever the view taken of the case on admission—whether the man was phthisical or not—whether a gap in the pleura existed at the time, or not—under all circumstances, an operation was unavoidable. But the drainage-tubes ought to have been inserted either on the instant, or, at any rate, after the discovery of the following conditions: free and direct communication between the left pleural cavity and the trachea, advancing disorganization of the right lung, and ever-increasing accumulation of pus, in spite of its enormous discharge. By adopting these measures, the pus might have been kept within bounds, and diverted from the trachea and bronchi; the pneumonic processes, which were so rapidly disabling the only lung of any real use in respiration, might have been arrested; and although the man must invariably have died an early death from combined exhaustion and apnœa, he said that the patient might have been saved from dying of downright suffocation—literally drowned in pus.

CANADA

Medical and Surgical Journal.

MONTREAL, JANUARY, 1873.

THE ONTARIO COLLEGE OF PHYSICIANS AND SURGEONS AND THE STUDENTS OF MEDICINE.

The Executive of the Medical Council of the College of Physicians and Surgeons of Ontario recently met in Toronto, at which meeting it was arranged that a deputation of medical students would be received and their grievances duly considered.

Dr. Campbell, a homœopathic physician of the City of Toronto, who appears to be the Chairman of the Council, received the deputation and remarked "that he understood them to represent the students of medicine at the different colleges throughout the Province, and he also reminded them that the interests of the Council and those of the students were quite the same in all respects; that the Council was entirely in sympathy with the students, and that they wished sincerely to hear of and to remedy, as far as was in their power, any cause of complaints they might have to make."

Mr. Dingwall, on the part of the deputation, presented written copies of the resolutions adopted by the students at their several meetings.

The resolutions submitted were substantially as follows:

Resolutions Adopted at a Meeting of Medical Students held at the City of Toronto on Saturday, 30th November, 1872:

1st.—That "Whereas the medical students of Ontario, while recognizing the benefits conferred on the medical profession generally through the establishment of a Central Examining Board for the examination of students in medicine, feel that the Act has signally failed in its main object, viz., in securing protection to regularly licensed practitioners, inasmuch as the country is literally flooded with quacks, druggists and others, with questionable qualifications, who, in open defiance of the presumed intention of

the said Medical Act, are openly practising medicine, surgery, and midwifery, to the detriment of legally qualified practitioners. It is therefore resolved that the Medical Council of Ontario be requested to take action during the ensuing session ot the Ontario Legislature, with a view to secure for the profession the protection so much desired."

2nd.—That "Whereas the said students of Ontario, considering that the fees charged by the College of Physicians and Surgeons of Ontario to candidates for examination before that body for license granted by them are exhorbitant, request that the said fees be reduced to $30, the said sum to include that for matriculation."

3rd.—That "Whereas the said students of Ontario, feeling the great inconvenience arising from the want of printed questions at previous examinations, demand that the questions hereafter propounded to candidates be handed to them in printed form, in accordance with the well understood custom of all our universities and other examining bodies."

4th.—"That the rejected candidates at examinations should have the privilege of either withdrawing the amount usually refunded, or leaving it in the Treasurer's hands, and in the event of going up for examination again no further fees to be demanded from them."

5th.—"That in the event of the Medical Council of the College of Physicians and Surgeons failing to comply with the above demands of the medical students now assembled, that we shall then take into consideration the advisability of not presenting ourselves at any future examination of the said Council." Or, as was moved in amendment and carried, that "providing the Medical Council entirely ignore the above resolutions and take no steps to remove the grievances complained of, we will not present ourselves at any future examination till such grievances be removed." —*Toronto Mail*, 2nd December, 1872.

The Chairman, having read over the resolutions, asked the deputation if they had anything further to say before he communicated to them the views of the Council, that body having already discussed the various points referred to in these resolutions, except that regarding the amount to be returned to rejected candidates.

Mr. Dingwall said that the deputation was there to present these resolutions, and to afford any explanation regarding any of them that might be required. Further than that, they had no remarks to offer.

The Chairman then went on to say that there seemed to have gone abroad among the students a feeling of antagonism to the

Council. He had to say to them that the students had the most hearty sympathy of the Council, who had a most cordial and earnest desire to protect them in the practice of their profession; but the Council, however willing to do all in their power, were not omnipotent, and had not the power to legislate for them. However strongly they sympathised with the students it was not in their power to redress any grievance. All that he could say was that the Council were not to blame because the penal clauses of the Medical Act were not sufficiently stringent. In the resolutions just submitted the students complained, and with justice, that these clauses did not afford sufficient protection, but he did not think Parliament could be got to meet their views on that question. The Act was passed with the purpose of protecting the public, not the medical profession; and it was only after taking that view of the matter that they had consented to do anything at all in the way of protection. Members of Parliament consulted the wishes of the whole of their constituents regarding the questions upon which they were to legislate, and not those of the few doctors here and there in the country. It was the interest of the Government and Parliament generally that the people should be furnished with as good medical attendance as possible, and the effect of the Act they had passed with this intention was that the prospects of students had been very materially raised since the standard was made higher, the number entering the profession diminished, and the competition consequently decreased. It was the intention of the Council to go before Parliament this session and get a Bill to amend the penal portion of the Act, which had proved totally inoperative on account of the want of any provision for enforcing the payment of the fine imposed for its infringement. This was required to be added, and he thought it was likely to be obtained. A committee had to be appointed for the purpose of drafting the proposed amendment to the Act. He might add, however, that this matter was not especially pressing upon the students, as they had not yet entered upon the practice of the profession. With regard to the amount they were required to pay by way of examination fees, the Council would be very glad to meet the views of the students. If the fees have hitherto been high necessity required it, for the medical gentlemen who come to conduct the examination must be paid. These gentlemen, it had to be remembered, in coming to conduct the examinations of students, were not merely giving them the benefit of their skill and experience, and putting themselves to considerable trouble and expense, but they were leaving their practice for the time being, which was a very great loss. Besides, the examinations were most

elaborate and complete, and he had no hesitation in saying they were the best in world. Any man taking his certificate in Ontario need not care whither he went, for he had the highest medical qualification which any man can possess. The examination, no doubt, costs money; but only in the event of obtaining succour elsewhere, either from the profession or from the country, could the requested decrease in the fees be granted. Help was asked of the Government, and the students would strengthen the hands of the Council greatly by petitioning Parliament. Accompanying the resolutions now presented there was something of a threat thrown out to the Council, which he thought they hardly deserved at the hands of the students; indeed it was hardly becoming the dignity of the Council to entertain resolutions so accompanied. It had the appearance of dictating terms to the Council, who did not wish it to be understood that the resolutions were carried before them at the point of the bayonet. The examinations always cost the Council a great amount of money, and by carrying out their threat and staying away from them, the students would injure themselves, not the Council. There was no doubt that had the students only reflected on the subject a little, they would have seen fit not to put this threat in at all. Reverting to the diminution of the examination fees, he said the Government had intimated that they would do something. If they did, this would enable the Council to do something for the students. If the students would petition Parliament it would enable the Council to go to the Goverment and, with something of authority, make their request for aid. The question of having printed examination papers was one which had led to a great deal of controversy. For he need not say that he had perfect confidence in the integrity of all the students, but a very great many of the students had not confidence in the rest. The examinations are always prepared so as to ensure the people of Canada shall have good sound medical advice from those who shall succeed in passing them, and the mode of conducting them was determined upon so that no student could possibly have any advantage over another. The great difficulty of having these examination papers printed is the possibility that thereby information regarding their contents might leak out; they could see themselves the principle which the question involved. If it was possible to have a printing press established in the room in which the examinations were to be conducted, and the printer under their own eyes, the thing might be got at, but in no other way. If this could be managed without incurring a great deal of expense, the views of the students might be met. So far as the writing out of these questions was concerned it was

enough to say the thing was impracticable. Professional men generally—and he was himself no exception to the rule—wrote so badly that students could not be expected to read their manuscripts correctly; and, of course reading correctly was necessary to proper understanding of the questions propounded. He thought he had now replied to the principal points referred to in the resolutions. That regarding the propriety of retaining or returning the fees of rejected candidates, according to the request in the resolution, the Council had not considered. He re-read the resolution bearing upon the question, and adverted to the present custom.

In dismissing the deputation the Chairman added that on this very same question of the penal clause he had conferred with both the present and the preceding Attorneys-General of this Province, who had informed him that a certain difficulty lay in the way of enacting such a clause. This was that the power of passing a criminal law does not lie in the hands of the Ontario Government. Mr. Mowat would not give a decided answer on this point. Doubtless several laws of this kind had been enacted, but these gentlemen seemed themselves to have their doubts as to their legality. He hoped that in the future the students would not take up any stand of antagonism to the Council, or accompany their requests with threats. The Council wished to be looked up to by the students as their friends and protectors. He repeated his assurances of good will, and that of the Council, and the deputation withdrew.—*Toronto Globe.*

We have somewhat to say respecting each one of the resolutions given above. It has been found a difficult matter in most countries, to repress quackery and prevent persons employing whom they please to attend them in any attack of illness. It does not necessarily follow that a man who has passed through the schools is always the most judicious, and people to the end of time will occasionally prefer being killed by a quack to being treated by a regularly educated physician. It has always been a difficult matter to legislate upon, and the experience of the profession in Canada, at least, is doubtful of the benefits to be obtained, or the protection to be obtained from the Legislature. It becomes to every man a matter of the personal surrender of rights, and so long as quacks and charlatans are recognised by the profession as equals, as they are in Ontario, as members of the body politic of Physicians and Surgeons, so long will the door remain open for the unscrupulous to enter without let or hindrance. In saying this we do not wish to impugn the central examining system of our sister Province of Ontario: indeed we think it right in principle,

and should be pleased to see it adopted throughout the Dominion, not exactly in whole, as there are many objectionable features in the Ontario Act which we need not specify. Speaking on the subject of the penal clause for the suppression of unlicensed practitioners, we do not think there should be any difficulty raised; but most likely there will be objections offered which may prove fatal to the efficient working of any amendment to the Ontario Medical Act that will be submitted to the Legislature.

In the second resolution the medical students complain of the fees charged by the College of Physicians and Surgeons of Ontario to candidates for examination before that body. These fees are styled "exorbitant!" This is a point in which we have no sympathy, as we have always held that the fees charged by colleges are, as a rule, too small. It will be noticed on referring to Dr. Campbell's address to the deputation of students that, in defending this charge, he states that the students receive, as an equivalent, the very highest qualification that can be obtained in the world. This, certainly, is a bold assertion, but one we will not question. The old motto, "Where ignorance is bliss," &c., &c., is very applicable here; and we presume that in future those admirable Crichtons who obtain the license of the College of Physicians and Surgeons of Ontario will not consider it worth their while to sacrifice more time in seeking from those old, worn out, and time battered institutions of Great Britain, honours which are now so unquestionably inferior in every respect. At least, if some novel-seeking souls do pretend to lower their status by submitting to further tests of proficiency, they will not have the advantage of a conglomerate board of examiners, some of whose doctrines are anything but orthodox in a medical sense. We are constrained to ask whether the College has yet issued its Diplomas, as we know of several persons whose names appear in the "list of those who have passed the several examinations established by the Council," but who do not possess a single evidence of the fact in the shape of a diploma.

With regard to the third resolution we think that the questions submitted ought to be printed, and with ordinary care this can be accomplished without any chance of the papers getting abroad before the proper time.

With regard to the fourth resolution it is certainly no grievance for the candidate to be charged a fee if he fails to satisfy the Court of Examiners as to his proficiency. In the case of the primary examination, the Ontario College retains seven dollars out of ten, the amount deposited by the applicant; and the candidate for final examination, if unsuccessful, receives back thirty dollars

of the forty he is required to deposit with his papers. This is a fair tax, and one which every right-thinking man will agree to; for why should the time and labour of the College officers be exacted free—gratis, by every blockhead who thinks himself a proficient.

We come now to what we regard as the crowning feature of this controversy, and we must say that we were perfectly staggared in perusing these resolutions. It will be observed that we have given the original motion, as also the amendment, which latter was carried by the meeting in Toronto. We are unable to state which of these motions was submitted by the deputation of students to the Medical Council; nor is it of any importance, as they are both of the same tenor. It is an act of open rebellion, and one which cannot be tolerated.

If the medical students of Ontario have grievances, and we are willing to believe they have, there are other means more dignified for a society of gentlemen to adopt than the threat of a mob. If reform is needed it can be obtained, as hitherto there has been no apparent desire on the part of the Medical Council to enforce rules which are objectionable; indeed the policy of that body, so far as we have been able to judge, has been conciliatory—too much so, perhaps. We trust our young friends will see that they have made a mistake in threatening the Council to stop supplies. Dealing in threats will more likely tend to elicit non-compliance on the part of the Council than otherwise, and the medical student cannot ignore the fact that the Council of the College of Physicians and Surgeons of Ontario is a legally constituted body, however incongruous its elements.

THE BEAUPORT LUNATIC ASYLUM.

We had written a long article on this subject, but as we observe that the matter is allowed to drop for the present we will reserve, for a future day, the remarks we had intended to make. We hope, however, that the asylum will not be overlooked, as the management of that institution has been for years a reflection on the Government of the Province. We have before alluded to the disgrace of having a Lunatic Asylum, under the style of the Provincial Lunatic Asylum, occupying a discarded court house and jail, as is the case at St. Johns; but then, so long as the present contract with the proprietors of the Beauport Lunatic Asylum exists; so long as the thousands of dollars are paid into the coffers of the contractors of the Beauport Lunatic Asylum, so long will things in this section of the Province of Quebec be allowed to remain in the same condition as when the Government report of the Imperial authorities were forced to style it the "miserable make-shift at St. Johns."

"THE FOSSIL MAN AT MENTONE."

In the London *Lancet* for December 7th we find a description, from the pen of Dr. J. Henry Bennett, of the discovery of the fossil man in the Baoussé Roussé Caverns, near Mentone, in March last.

The work of exploration of the Caverns of Mentone was entrusted, by the French Government, to a distinguished geologist, M. Rivière. The skeleton is at present in the Anthropological Department of the Geological Museum of Paris, and has been visited and examined by many of the scientific men of the day.

The skeleton, which is all but perfect, is that of a large man, upwards of six feet in height, and has no resemblance to the orang or any species of monkey. The skull is elongated, convex superiorly dolichocephalic. The entire superior maxillæ are seen and the teeth are all present. The inferior maxilla is only half exposed, but the teeth in that half are perfect. The molars are worn flat, as though from the constant trituration of hard food. The orbital cavities are peculiar, they differ in length and diameter from those of any known race of men, and closely resemble, in that particular, to some of the specimens found in 1868 at Cro-Magnon, in Perigord. M. Rivière thinks that this peculiarity may imply a pre-historic and last type of man.

Medical News.

DR. DITTERICH ON GOUT.

Ditterich (*Lo Sperimentale*, t. xxx.) says that the carbonate of lithia is the most potent of all remedies in gout, or wherein there is excess of uric acid in the blood; and this salt has recently fallen a little into discredit, because not suitably prescribed. The dose of five to ten grains, recommended by Aschenbreuner, generally produces rather disagreeable symptoms, as dyspepsia, catarrh of the stomach or intestines, with vomiting, &c., which requires the cessation of the remedy. These doses are too large, according to Ditterich, to act well, and the dose should not exceed two grains, and in the twenty-four hours not more than fifteen grains should be given. The other problem to resolve in treating gout, is if the case be in the acute or chronic stage, for in the first lithia is not indicated, whilst in the second the carbonate may be given in the proportion of seven grains in a six-ounce mixture, and one or two

tablespoonfuls every two hours. Thus administered, lithia gives rise to no inconvenience, and generally is followed by good results in eight to ten days, during which time the parts should be covered with pieces of flannel or woollen cloth. According to Ditterich the swellings produced by gout which have passed into the state of induration, are not attacked by lithia which is in the circulation, until the adjacent parts of the affected limb are congested by means of some stimulating embrocation.—*The Doctor.*

DIFFICULTY IN DIAGNOSIS OF TUBERCULAR MENINGITIS.

Dr. Peter (*Jour. de Med. et Chir. Prat.*) says that meningitis is a pregnant source of errors in diagnosis, and we ought to be on our guard against such. Thus, a patient entered the hospital under violent delirium which had burst forth without any warning, and the diagnosis was made *delirium tremens.* Yet the autopsy showed the patient had tubercular meningitis. Generally, tubercular meningitis commences with pain, convulsion, strabismus, &c., all its symptoms in a word, whilst the intelligence is intact. Here the contrary had taken place, because the patient was a confirmed drunkard, and that, when the cerebral lesion came on, it had changed his disease into the delirium tremens. In these difficult cases for diagnosis, it is important often to look to one symptom, to the antecedents, and to study closely the whole of the phenomena; if in doubtful cases we arrive at finding a meningeal ailment, we have a great presumption gained.

Sometimes the commencement of the disease is marked solely by repeated vomiting, without elevation of pulse, or any other symptom. We then inevitably think of indigestion, and the error is only dispelled by the progress of events. A child, aged 18 months, was attacked with retention of urine, and remained forty-eight hours without micturating. This was not a case of anuria of infants with fever, for the bladder became distended, and was emptied by the sound. There was true constipation of the bladder present. M. Peter called in in twenty-four hours, found that the child, offspring of a delicate mother, was crying in a peculiar way, whilst its face was covered with a blush. The "cerebral spot" could be made to appear, although ill-marked, and there was a very feeble convulsive shock. He made the diagnosis of tubercular meningitis which was soon justified by the termination of the disease.

On another occasion he was called to the neighborhood of Paris for a child convalescent from measles. The left side of the body had one day commenced to be palsied, without signs of apoplexy, and in twenty-four hours the palsy was progressively completed.

However unaccustomed the commencement appeared, in the absence of all possible supposition, and in view of the antecedents, finding the child delicate, M. Peter thought of meningitis. The abdomen was retracted, and he noticed a well-marked mark of meningitis. He decided for a tubercular meningitis, and attributed the hemiplegia to accumulation of tubercular granulations at one point of the base of the brain having caused a small ficus of softening. In fact, soon the collection of symptoms developed themselves, and the child died with all the signs of cerebral meningitis.

Although constipation is an almost constant symptom, it may be wanting. M. Peter was called to a delicate child, aged 3 years, who had been somnolent for some days, and attacked with abundant diarrhœa. The state of coma was so profound that when the child was shaken it did not move. M. Peter diagnosed tubercular meningitis in spite of the diarrhœa. We may consider the disease for some days as tubercular peritonitis. The child fell away rapidly, its cries became more characteristic, and the meningeal spot could be noticed clearly with cutaneous hyperæsthesia. One day convulsions with irregular pulse supervened, and death with epileptiform attack.

This short collection of unusual cases shows the necessity of grouping any symptoms which are noticed. In this case the meningeal stain which is provoked by scratching with the nail the skin of the abdomen, chest, or limbs, and which persists pretty long after the scratch, becomes a symptom of importance. Taken by itself its value is infinitely lessened.—*The Doctor.*

SIMULATED CHLOROSIS.

M. Potain lately lectured on this subject at the Hôpital Necker, and his remarks were reported in the *Journal de Médicine et de Chir. Prat.* He thinks that chlorosis is simulated by several other diseases. Perhaps the English school would rather speak of the other diseases producing a cachetic state resembling, to some extent, chlorosis. We may also remark that most Englishmen would, in the majority of the instances named, have used the word anæmia. Thus M. Potain speaks of all hæmorrhage as likely to simulate chlorosis. The next group he mentions is that in which the digestion is at fault—cases, as we should say, of mal-nutrition. Next we have cardiac diseases and ex-ophthalmic goitre, in which diseases we have ourselves seen patients with what is called a chlorotic look. We may say the same of another group, including diseases due to marsh miasm, to lead poisoning, to iodism, and to syphilis. In pregnancy, leucorrhœa, and some other conditions, there is a state that M. Potain calls simulated chlorosis, but which we should classify as anæmic or cachetic. We think the various cachexias worth observing, particularly in reference to malignant disease.—*The Doctor.*

Monthly Summary of Meteorological Observations taken at No. 26 Beaver Hall, Montreal, by THOS. D. KING:

OCTOBER, 1872.						NOVEMBER, 1872.					
Day of Month.	Daily Mean Temperature, 7 a.m., 2 p.m., 9 p.m.	Daily Mean Humidity between 7 a.m. & 9 p.m.	Daily Mean Barometer corrected to sea level.*	State of the Weather.	Quantity of rain gallons per acre.	Day of Month.	Daily Mean Temperature, 7 a.m., 2 p.m., & 9 p.m.	Daily Mean Humidity between 7 a.m. & 9 p.m.	Daily Mean Barometer corrected to sea level.*	State of the Weather.	Quantity of rain gallons per acre.
1	54.4	74.5	29.97	O'rcast		1	44.1	84.2	29.92	Rain	11312
2	49.8	73.5	82	Rain	inapp	2	41.7	91.0	30.00	Rain	9049
3	48.5	86.7	77	Rain	2714	3	38.0	85.2	04	O'rcast	..
4	50.6	73.3	30.09	Cloudy		4	39.1	74.1	31	Clear	....
5	55.2	76.4	17	Clear		5	40.6	78.5	26	Clear	..
6	64.1	77.6	05	Th'ndr	22623	6	45.8	84.5	03	Rain	....
7	56.5	96.2	29.96	Rain	42384	7	42.4	71.4	29.61	O'rcast	...
8	51.9	78.8	30.11	Cloudy	inapp	8	40.1	75.0	39	Gale	....
9	53.1	68.4	04	Clear		9	40.5	59.5	91	Clear	....
10	47.2	84.5	29.85	Rain	2262	10	38.1	64.6	30.24	Clear	...
11	39.3	64.2	30.13	Snow	inapp	11	37.9	78.7	15	Cloudy	....
12	41.9	60.3	15	Clear		12	44.5	95.3	29.87	Rain	20410
13	45.2	77.8	29.88	Rain	18098	13	36.9	79.7	30.14	Clear	....
14	39.1	90.0	51	Rain	6787	14	37.0	94.0	29.83	S & R	11312
15	40.0	70.6	79	Rain	2036	15	31.0	71.9	74	Snow	5226
16	40.4	90.5	30.05	Rain	11312	16	31.4	83.0	30.06	Snow	4452
17	44.5	74.2	27	Rain	2262	17	28.7	67.7	33	Clear	...
18	47.8	83.9	29.99	Rain	6787	18	31.5	66.6	20	O'rcast	
19	39.8	70.6	30.08	Rain	inapp	19	29.2	81.8	29.94	Snow	3383
20	40.5	67.4	12	Clear		20	22.3	78.0	95	Cloudy	....
21	47.8	72.4	10	Clear		21	29.2	75.0	30.07	Hazy	..
22	57.8	68.0	11	Clear		22	31.9	69.0	29.99	Hazy	...
23	47.6	74.4	44	Rain	4525	23	32.1	89.0	30.01	Snow	2262
24	44.0	74.7	59	Clear		24	35.8	82.0	16	O'rcast	...
25	45.7	77.0	38	Clear		25	41.3	77.4	29.75	Squ'lly	....
26	44.9	92.6	29.95	Rain	18098	26	28.8	74.0	30.14	Snow	inapp
27	44.5	73.3	95	Rain	9049	27	27.8	78.0	.04	O'rcast	2267
28	38.2	71.7	30.47	Aurora		28	22.9	73.5	.21	Clear	
29	40.1	62.7	68	Clear		29	24.7	80.0	29.77	Snow	9049
30	42.2	66.3	56	Clear		30	13.9	78.0	34	Breezy	....
31	41.8	78.2	19	Hazy		..	....	....	.....	.....	.....
MEAN	46.6	76.4	30.02			MEAN	34.7	77.6	29.96		

OCTOBER.

Extreme Range of Temperature	42.5
Highest point of Thermometer on the 6th	74.0
Lowest point of Thermometer on the 29th	31.5
Extreme Range of Barometer	1.23
Highest Reading of Barometer on the 29th	30.71
Lowest Reading of Barometer on the 14th	29.48
Extreme Range of Humidity (Saturation 100)	55.1
Greatest Moisture in the air on the 14th	96.5
Least Moisture in the air on the 29th	41.1
Whole amount of rain in the month	6.501 inches
General direction of the wind	Variable

NOVEMBER.

Extreme Range of Temperature	37.2
Highest point of Thermometer on the 6th	48.2
Lowest point of Thermometer on the 30th	11.0
Extreme Range of Barometer	1.2
Highest Reading of Barometer on the 17th	30.41
Lowest Reading of Barometer on the 30th	29.24
Extreme Range of Humidity (saturation 100)	52.13
Greatest Moisture in the air on the 14th	96.0
Least Moisture in the air on the 9th	44.1
Whole amount of rain and snow in the month	3.710 inches
General direction of the wind	Variable
First snow to remain on ground	on the 15th

* Not for Temperature.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Cases of Scarlatinal Empyema occurring in the Practice of FRANCIS W. SHERRIFF, M.D., *with a Note from* Dr. R. P. HOWARD.

On the 9th April, 1842, I was called a distance of ten miles to visit two sons of Mr. James Lunan; the eldest, John, was 5 years old; the other, William, was three years. They were seized *ten weeks* before with scarlatina, both at the same time, and they recovered easily. At the end of a fortnight they were both seized with pyrexial symptoms and general anasarca. An irregular practitioner living in the neighborhood attended them constantly until I was called in.

On examination I found them both laying on the left side, having been unable, for the past eight weeks, to lay on the right; the respiration was, in both, very laborious, and they constantly made a moaning noise; their shoulders were elevated, and they kept their right arms extended, generally grasping firmly their right knee; the left side emitted no sound on percussion; John's chest was $23\frac{3}{4}$ inches in circumference, and the left side $1\frac{3}{4}$ inches larger than the right, and the left side of William was 1 inch larger than his right; their abdomens were much protruded, giving the appearance of ascites; their hearts beat on the right side; their tongues were much furred; urine was scanty, and bowels confined; the appetite good; had frequent desire to go to stool, but had little evacuations; pulse, 118—feeble.

I applied blisters to both, and gave the following prescription: Inf. Digital, ℥xvj.; Spts. Ether Nit. Potas. Acet. *aa.* ℥j. A tablespoonful every eight hours. In addition, Calomel, Pulv. Scillæ, Pulv. Rhei., *aa.* gr. j., in pill every eight hours.

At the end of one week William could lay on his right side, and the circumference of chest diminished; abdomen not so distended; general appearance of countenance improved. As will shortly be

seen that improvement was fallacious; no amendment had taken place in John, and I had resolved to perform the operation of thoracentesis immediately. I accordingly introduced a trochar between the ninth and tenth ribs, midway betwixt the ensiform cartilage and the vertebræ. A gush of pus instantly took place, and after having removed twenty two ounces I withdrew the canula, as the boy appeared very faint. I again introduced the canula in two hours, and did not remove it until it ceased running, another twenty-two ounces having been discharged—altogether forty-four ounces. The child was much relieved, and did not make use of his arm in respiration, and ceased to make the moaning sound; his pulse fell to 95—strong and regular.

On the morning of the 20th I again visited the boys, and introduced the canula, as John's breathing seemed to be more laborious. Only half an ounce came away; his appetite was very voracious, and had to be restrained: heart still beats on the right side. William seemed much the same, and I intended tapping him soon. I reached the house that morning before breakfast, and the two boys insisted on breakfasting with me. William ate some custard greedily, and drank some of the liquid part which remained. He also partook of tea. Before I had finished breakfast he asked to be put into his cradle, and then into his bed, and to be raised up. In about five minutes after finishing his breakfast I observed him suddenly become pale and his head droppod on his breast. I ran to him, lifted him in my arms and laid him on the bed. A dark flush shot rapidly over his face, and he expired.

Next day I examined the chest and removed a little over fifty ounces of matter. The lung was entirely absorbed, scarcely a vestige remaining; pleura slightly thickened; the heart laying on the right side, and the pericardium full of serous fluid; stomach was much distended, the pressure of which was probably the cause of his death, he having eaten so heartily a few minutes before.

May 6th.—I again tapped John, and this time removed fifty-two ounces. I left the canula in the chest with a plug in it; pulse, 130; countenance flushed; strength improving—can now walk; circumference of chest the same; heart still beating on the right side.

On the 8th I drew off sixteen ounces; on the 10th eight and a half; for the next four days four ounces each day—making, altogether, from the 20th April, one hundred and thirty-six ounces in twenty-four days.

13th.—Visited him; general health much improved; pulse, 100—of good strength; heart beating in mediastinum; slight respiratory

murmur in upper part of left side; tongue cleaning; bowels regular. The canula was now removed.

22nd.—Wound has apparently healed up; ribs have came together, there being scarcely any space between them.

26th.—Matter had again collected and forced itself through the old opening, and continued escaping for a month or two. The wound at last healed and he regained tolerable health. He died in 1854 from enlarged heart, with general dropsy. The left side never expanded, so that he actually lived for twelve years with one lung. He was never able to work, but assisted his mother in doing house-work.

I attended another case of scarlatinal pleurisy, with effusion of pus, in the Township of Burke, State of New York. He was a lad of about 13 years, and was under my charge for this disease two years and nine months. I tapped him once, removing a quart. Afterwards he spat it up through the lungs, a perforation having been made into a bonchial tube. He recovered entirely, and became a strong man, and afterwards removed to Illinois.

I have performed paracentesis thoracis frequently for empyema, following pleurisy, with general success: but invariably some time after tapping the matter was discharged through the lungs. A notable case of this was Mr. T. M., at present residing in Montreal. I removed from him eighty-eight ounces of pus at one run.

I have forgotten to mention that quinine was administered liberally, and some of them took cod liver oil, but no alcoholic stimulants were given.

Huntingdon, 7th December, 1872.

Mr. Editor,—The above interesting paper was sent me by my friend the writer, and with his consent I have forwarded it to you for publication. It affords evidence of the correctness of the opinion contained in my former paper upon the same subject, to the effect that the products of scarlatinal pleuritis are usually purulent. It is worthy of remark, also, that in two of the three cases general dropsy co existed—(whether it was so in the third is not stated)—a circumstance favouring another suggestion in the same communication as to the influence operating in scarlet fever in the production of empyema rather than of simple pleuritic effusion.

The sudden death by syncope, of the younger child, is a striking proof of the danger of copious effusion into the pleura, and supplies a strong argument, if any is yet needed, for the practice of tapping the chest when copious pleuritic effusion does not

become absorbed after the employment of appropriate remedies for a reasonable period. May I not add that Dr. Sherriff's cases, together with my own, justify the advice I have given elsewhere, "That in *scarlatinal* pleurisy, where the signs of effusion are marked and do not promptly disappear, it is well to make an exploratory puncture of the chest at a *much earlier* period than is even now customary in *ordinary* pleurisy following *exposure*." *

You will, no doubt, join me in the hope that Dr. Sherriff will embody, in another communication, his further experience of thoracentesis in empyema. Yours,

R. P. HOWARD.

BEAVER HALL HILL, December, 20th, 1872.

Removal of a Large Calculus Partly Impacted in the Urethra of a Paraplegic Woman, by the Combined Operation of Cutting and Dilating the Passage. By JOHN MCCURDY, M.D., C.M., of Chatham, N. B.

On the 6th May, 1872, I was called to see a married woman, aged 35, whom, I found, had been the subject of paraplegia for the past six years; or, since the birth of her last child. She was suffering from all the symptoms of this form of paralysis; such as loss of power and sensation in the lower extremities, incontinence of urine and fœces, &c. The most interesting physiological feature in the case, however, in connection with the nervous legion, was the fact that she was again pregnant and within six weeks of her confinement. The reason of my visit, however, was to explain, if possible, certain anomalous symptoms referable to the bladder which had recently been noticed and had given her considerable uneasiness. There had been of late some difficulty in getting the bladder emptied, and the flow of urine would at times suddenly cease. I immediately proceeded to make a careful examination of the parts: first externally, and then internally, with an ordinary female catheter. With the latter instrument I readily discovered what appeared to be a calculus lodged in the urethral canal, near the point of entrance of the latter into the bladder. Having satisfied myself respecting the character of the foreign body, I thought it advisable to proceed to its removal without further delay. I gradually and with care dilated the urethra by means of flexible bougies, having nothing more scientific conveniently at hand. The canal being

* CANADA MEDICAL AND SURGICAL JOURNAL, December, 1872, p. 246.

at length dilated to its fullest extent I attempted, by means of the ordinary lithotomy forceps of a small size, to withdraw the stone but found I could not move it in the least degree. Nothing was left but to divide the urethra in front of the calculus, which I did with an ordinary scalpel, and then the resistance being removed I readily grasped the stone and extracted.

I found the calculus to be of the lithic acid variety, alternating with phosphatic, and of the following weight and dimensions: Its weight was 742 grains Troy (1½ ozs. 20 grs.) and measure 2 7-16th inches in lengh, and 1 5-16th by 1¼ inches in breadth.

In the operation I employed no anæsthetic, the parts themselves being already insensible. She bore the operation admirably, and never afterwards suffered from any outward symptom. The urethra rapidly regained its former dimensions, but the incontinence of urine was not, of course, much, if any, relieved, the paralysis of the bladder remaining. In due time, however, I delivered her, after a natural labour (as far as the uterus was concerned), of a fine, healthy child, and her own condition, in general, seems to be much improved by this second act and process of child-bearing.

I submit this case, not on account of the operation, for that, under the circumstances was simple enough; but I look upon it as one of very great interest to the scientific accoucher and physiologist. In the first place, her sudden paralysis, occurring immediately after parturition, and for which no satisfactory cause could be assigned, was remarkable. Then, the fact that after six years, and while paraplegic, she should carry a child to the full term and pass through a natural labour, is none the less interesting and remarkable. When I performed extraction of the calculus *per urethram* I did so fully alive to the fact that little or no harm to the urethra or its contents was likely to accrue while the parts were in their then anæsthetic condition. It is easy to understand why concretions of the urinary salts should form in the bladder where its natural functions are impaired, and where sedimentary deposits may be retained for a considerable length of time.

A Visit to the London Hospitals. By William H. Mondelet, M.D., C.M., Fellow of the Obstetrical Society of London, late House Surgeon Children's Hospital, London, England, &c.

London offers innumerable advantages to medical men who make it a point of devoting their attention to matters concerning their profession. On arriving in that great city, a world of itself, the stranger is completely lost, finding himself among people who, as a rule, are only interested in what concerns themselves, and to whom strangers present little or no novelty: he wanders about

the city until, perhaps, he happens to encounter a friend who, probably, has been initiated into the mysteries of London. He is fortunate if such be his luck, as thereby he is likely to become acquainted with the different objects of interest concerning his profession or otherwise.

The hospitals in London, which are very numerous, are conducted with such discipline and good management as to draw forth the praise and admiration of all strangers. Each hospital has its staff of consulting physicians and surgeons, besides those attached who attend daily at different hours. There are also house physicians and surgeons, and a resident "accoucheur," the latter having the entire charge of the midwifery department. This branch of the profession is represented at many hospitals in London. Women who cannot pay a medical man apply, during their pregnant state, to a hospital; a ticket is issued to them, and when their labor comes on this ticket is sent to the hospital; the resident accoucheur, who has under him two obstetric clerks, immediately sends one to the owner of the ticket, as he generally reserves himself for labors of an intricate nature, or those requiring the use of instruments, having himself served a clerkship under some former Resident Accoucheur. This appointment, as well as that of House Physician and Surgeon, are valid for three or six months, according to the regulations of the hospital. Each hospital has a department for Skin diseases, as well as for Vaccination, and Dental operations. Being divided into a Medical and Surgical Department, the officers never come in contact with one another except when required in consultation. Besides the larger hospitals there are others where only special diseases are dealt with. Each hospital has a day or days set apart for operations, a list of which is to be seen in the *Lancet* or *Medical Times*.

Guy's Hospital, which is situated near London Bridge, is one of the best in London, is renowned for its surgery; in fact, all the branches of the profession are well represented here. Mr. Edward Cock, Mr. Durham, Mr. Bryant, Dr. Phillips, its secretary, and other men of note, are the medical officers of this hospital. I had the pleasure of witnessing several surgical operations here, and one in particular, viz., Excision of the Kidney, performed by Mr. Durham, which struck me as being one of rather rare occurrence. Chloroform was the anæsthetic agent made use of in this hospital. The dissecting apartments are exceedingly well laid out, and very comfortable for the students. There is seldom, if ever, scarcity of material. The museum of Guy's Hospital, with that of the Royal College of Surgeons, are supposed to be the best in London.

London Hospital, situated in the east end of London, in close proximity with the docks, is considered to be the centre of heavy Surgery. Such men as Jonathan Hutchinson, of syphilitic celebrity, Cooper and Maunder, form the attending surgical staff.

St. Thomas' Hospital, situated in Stangate, opposite the Houses of Parliament, consists of seven distinct buildings, all connected, one with the other; although distinct so far that in case of fire communication can be immediately cut off, one from the other. The operating room, dissecting room, and eye departments, are very fine, the latter under the direction of Dr. Liebreich, the celebrated oculist, are especially so. Among the officers connected with this hospital we find Dr. Barnes, Dr. Briston, Mr. Legros Clarke, Mr. Sydney Jones, Mr. Croft, and others.

King's College Hospital, situated in Lincoln Inn Fields, is supposed to be the best conducted hospital in London. It is nursed by Protestant Sisters of Charity, who generally are ladies who devote themselves entirely to their calling. Sir William Ferguson, JohnWood, Henry Smith, the great advocate for excisions of the joints, Dr. Johnson, and Dr. Playfair, one of the Secretaries of the Obstetrical Society, are to be seen here. Chloroform is entirely used with Weiss' patent.

University College Hospital is another of those institutions, nursed by Protestant sisters. Its Medical Society and library are well known in London. It can boast of such men as Erichsen, Sir Henry Thompson, Christopher Heath, Berkeley Hill, Dr. Wilson Fox, and others. Chloroform vapour is used here in all operations, an apparatus invented by a surgeon connected with St. George's Hospital, being employed.

Charing Cross Hospital is a small but convenient hospital, not nursed by sisters, but by attendants similar to those at the Montreal General Hospital. Its position being central it is easy of access, and offers many advantages to medical men.

St. George's Hospital, the aristocratic hospital of London, is situated at Hyde Park corner, and is principally patronised by men reading for the army. It is one of the best in London, and having a great number of wards, a great deal is to be seen.

Consumptive Hospital, is a building beautifully situated on the Brompton Road, and is really worth visiting. One advantage offers itself to those interested in chest diseases, viz., clinical assistants are permitted to reside in the hospital. Besides the numerous opportunities of watching phthisis in its different stages, considerable expense is saved, which, with many, is a consideration, especially in a place like London.

Western Hospital, Hammersmith, is a rising hospital, and well

worth visiting. Dr. Wiltshire, known to some Canadians for his affable manner and ready willingness to advance the interests of strangers, is connected with this institution being one of its physicians.

St Bartholemew's Hospital, situated in Smithsfield, is one of the largest in London. Among the celebrities is Dr. Greenhalg, whose clinique is certainly very interesting and instructive.

The Royal Ophthalmic Hospital, Moorfields, is one of the wonders of London, the out-patients waiting-room resembling a church with a packed congregation, so numerous are the applicants. The patients are seen every day in the week, there being a large medical staff of officers. Each day is represented by three out of their number, who also operate on their respective days. Among the celebrities are noticed Mr. Bowman, Mr. Critchett, Mr. Soelberg Wells, Mr. George Lawson, whose manual on diseases and injuries of the eye is in every studio. Jonathan Hutchinson, Mr. Cooper, and others are connected with this establishment. Mr. Critchett performs all his operations under the influence of chloroform. Mr. Bowman seems to prefer the Bichloride of Methylene. Having administered the latter and seen it also frequently given, I intend making here a few remarks about its employment. From what I have seen and learned from the House Surgeon, Mr. Morgan, it seems better fitted for operations of short duration. On its being first administered to the patient, a sense of suffocaation, compared to fainting, is felt, giving rise to struggling on the part of the patient, after which he falls into the same state as characteristic of chloroform. It has this advantage, that the patient is very soon placed under its influence and is easily resuscitated, which is an important item at Moorfields, where there are so many operations. The procedure for cataract is done according to Von Graeffe's method, and seems to give general satisfaction. Strabismus is performed by the sub-conjunctival incision. A hook is introduced under the conjunctiva and the muscle laid hold of. It is next divided as close to the eyeball as possible; sometimes the cut edges are brought together by a silk suture: seldom a bandage is applied over the eyes.

Iridodesis, first proposed by Mr. Critchett, is frequently substituted for the ordinary iridectomy, this operation consists in ligating the portion of the iris drawn out of the wound, and allowing it to slough off. Being curious to know the advantages of such an operation, I questioned Mr. Critchett whereupon he informed me that instead, as in ordinary iridectomy, of having an immoveable pupil, through adhesions taking place, and also a shapeless one, an oval and moveable pupil was obtained. Extraction of the

Eyeball, in suitable cases, is done in the following manner: The patient being placed under the full influence of an anæsthetic agent, an incision is made around the cornea with a pair of scissors; the conjunctiva is freely divided from the texture of the eye; then, with an ordinary strabismus hook, each rectus muscle is divided as close as possible to the eyeball; the eye is then slightly drawn forward, and, with a curved pair of scissors, the optic nerve divided. When the eye is readily lifted from its bed, leaving only the oblique muscle to be severed, Mr. Bowman then applies a suture to the folds of the conjunctiva. The other surgeons do not adopt this plan. In cases where the eye has been extracted for carcinomatous disease the interior of the orbit is touched with a solution of the Pernitrate of Iron, with a view of destroying remains of cancer cells; the orbit is then well plugged with sponges, and a compress and bandage applied. Granular lids are treated with a solution of Nitrate of Silver, and washed separate afterwards with a solution of salt and water.

Hospital for Women, Soho Square, being one of the special hospitals, it is restricted to diseases characteristic of the female sex, save those of a venereal character, of which I will speak further on. There are several wards in the interior of the hospital for diseases of an acute or chronic nature, under treatment of the medical staff. There are a full compliment of nurses, under the supervision of a matron and sub-matron. The operating theatre is well adapted for strangers visiting on operating days. The out-patients department calls here for a few remarks. I might venture to say with safety, that an average number of 200 patients per day are seen and prescribed for. One part of the room is entirely devoted to examination by the speculum or otherwise. This hospital, above all others in London, offers a large field for this this kind of practice. I noticed, in ulcerations of the os uteri, the following applications made use of, viz., the solid stick of Nitrate of Silver, Nitric Acid, and the Pernitrate of Mercury; after the latter a solution of Carbonate of Soda is generally used to decompose the solution of Mercury and protect from injuring on the healthy parts. Tannic Acid is generally used in cases where the woman is pregnant. Among the medical officers connected with this hospital the following are the most prominent: Dr Protheroe Smith, Dr. Alfred Meadows, author of the manual of midwifery, Dr. Christopher Heath, Dr. Edis, and Dr. Squarey. Dr. Meadows, who seems to command the operations for ovariotomy, uses the ligature, allowing the pedicle to return within the abdomen; the abdomen is then stitched up and bandaged, after which the patient is removed to her ward, where every care

and attention is bestowed upon her. Chloroform is generally used. No apparatus is used save a piece of lint folded into a square.

Samaritan Hospital for Women and Children in a good many respects resembles the one in Soho Square. Spencer Wells, of ovariotomy repute, operates here. Medical men from all parts of the world congregate here. In this hospital the operation is performed on the woman in the same ward into which she was conducted on her first admission to the hospital. Having been placed under the influence of methylene, which is generally used, the ordinary incision is made, and after having reached the cyst, a trocar and canula are plunged into the tumor, and its contents allowed to gradually flow out. The upper end of the canula is provided with a grasping apparatus, which takes hold of the walls of the cyst, and being water-tight, the tumor can be dragged out of the abdomen with comparatively little risk of any fluid escaping into the abdomen. A clamp is next placed round the pedicle, as also several ligatures; then an incision separates the tumor from the woman. The cut edges of the abdomen and peritoneum are then brought together by sutures, and the clamp allowed to remain outside the abdomen. After a few days the clamp falls off, through sloughing of the end of the pedicle, and the remainder returns within the abdomen. Muriate Tincture of Iron is freely applied to the cut edges of the pedicle; cotton wool, oil silk, and, finally, bandages, complete the operation. The patient is then removed to bed, and for the next forty-eight hours is simply treated with ice, ice-water, and opium. After that time has elapsed stimulants, such as champagne, are cautiously administered. It is universally acknowledged that Spencer Wells has the lowest average mortality, and when one comes to consider what can be the reason, it would seem obvious that the fact of not subjecting the patient to the influence of a change of temperature, by moving her from one room to another, as also the strictly antiphlogistic treatment she is subjected to for the first forty-eight hours, may have something to do with it. Again, I am told that Mr. Spencer Wells generally operates on patients before their health begins to break down. One case I witnessed where Mr. Wells operated on a patient for double ovariotomy, she recovered and left the hospital cured. Dr. Williams, connected with this hospital, I have seen inject a cancerous mass attached to the os uteri, with a solution of Bromine, a Ferguson's speculum having been introduced. An instrument invented by Dr. Williams, a good deal on the same principle as the hypodermic syringe, only much longer, is filled with the solution, and having a needle attached to it like

the hypodermic apparatus, it is thrust into the tumor and evacuated of its contents. Good results have been obtained by this procedure, and the cancerous tumour is said to have separated from its attachments.

Anoter Hospital for Women, of rather a novel nature, under the immediate management of women, is in vogue in London, at the head of which stands Mrs. Garrett Anderson, M.D., Paris, of undoubted education and capacity. She has a colleague in the person of Miss Morgan, M.D., Paris. I had occasion to visit this hospital with my friend Dr. Yunger, by invitation from Mrs. Dr. Anderson. We were shown around the different wards, which were the essence of neatness, and well stocked with patients. This hospital is in great favor with Londoners, and is making rapid strides towards success. The house-surgeon, apothecary, in fact all connected with the hospital are women. Several lady doctors from different parts of the world make this hospital their headquarters while in London.

Children's Hospital, Chelsea, adjoining the Royal Military Hospital at Chelsea, is situated in the southwest part of London, on the banks of the Thames. It is entirely devoted to diseases of children. It has its medical and surgical wards, as also a detached building for contagious diseases. Hip-joint disease, which is very prevalent here, is dealt with by extension and constitutional treatment. Great stress is laid upon the administration of Cod Liver Oil and the Syrup of the Iodide of Iron, which form the method of treatment of most children's diseases. I had occasion, as house-surgeon, in cases of croup, to perform tracheotomy. In one case the operation was performed early and the patient saved. Ammonia with Seneka is much used in chest affections, with the use of stimulants. Dr. Ellis, the senior physician, has written a work on diseases of children. Mr. Cowell, Dr. Evans, Dr. Cavafy, Mr. Churchill, and others, are the medical officers of this charity.

The Children's Hospital on Great Ormond street is carried on upon the same principle as the Victoria, situated in Chelsea. At both of these hospitals the aspirator is frequently used with success.

St. Mark's Hospital for Fistula, City Road, Islington, is noted in London for the number of operations witnessed there by men from all parts of Europe. The fistulæ are laid quite bare and afterwards plugged with cotton wool and a bandage applied. The patient is then put to bed, and in the course of a fortnight or three weeks he can rise and walk about. Hemorrhoids are treated here with a ligature, having been previously incised at the base, and after the application of the ligature these ends are nipped off.

Mr. Allingham, Mr. James Lane, and Mr. Gowland, are the surgeons of this hospital. They are exceedingly courteous and communicative to strangers.

Lower down on the same road is a hospital for diseases of the chest, of which Dr. Dobell is the senior physician. Good practice may be obtained here with the sthethoscope.

St. Peter's Hospital for stone and diseases of the bladder, situated in the west centre of London. Walter Coulson, and Buxton Shillitoe, are the principal men. Lock Hospital, Dean street, Soho, for venereal diseases. Both men and women are treated at this Hospital for this complaint on different days of the week. Berkely Hill, James Lane, Mr. Gascoyen, and Buxton Shillitœ, are the principal men connected with this hospital.

There are many other hospitals not of much importance. I might mention one in Golden Square, for diseases of the throat, under the direction of Morell Mackenzie. This gentleman is one of the authorities in London on diseases of the throat.

Hospital Reports.

Medical and Surgical Cases Occurring in the Practice of the Montreal General Hospital.

Surgical Cases Treated in the Montreal General Hospital during the Quarter ending 31st December, 1872. Under the care of G. E. Fenwick, M.D. Reported by T. G. Roddick, M.D., House-Surgeon.

Case I.—*Staphylorrhaphy.*

Demithilde Lavoie, aged 25, a French Canadian seamstress, applied for admission on the 7th October, with the hope of having an operation performed for the cure of very extensive congenital fissure, involving chiefly the soft palate. Dr. Fenwick, thinking the case a suitable one for operation, ordered her admission.

With a view of making the throat less sensitive the patient was put on a course of bromide of ammonium, in ten grain doses, thrice daily; besides having the edges of the fisure handled from time to time as a preparatory measure. After a week she was pronounced "in condition," and on the 13th the operation was performed in the following manner:

A number of sewing-machine needles, with the eyes near the point, were in readiness, threaded with waxed white silk, as also

a couple of full-curved, small-sized surgical needles. The patient's head being held by an assistant standing behind the chair on which she was seated, (no chloroform being given), Dr. Fenwick proceeded first to transfix the points of the bifid uvula, each with a separate thread, by which they could be held steady, and at the same time the movements of his knife directed. He then pared the edges of the fissure throughout their entire length, removing from each side a long strip of tissue. The next step in the operation was the division of the tensor palati muscles, known to be effectually done by the absence of all resistance when the threads in the uvula were put on the stretch. Now all was ready for the introduction of the sutures. This was commenced from above, by transfixing the soft parts about three-eighths of an inch from the angle of the fissure, with one of the sewing-machine needles, catching the loop of silk as it emerged behind, and bringing it out of the mouth, withdrawing the needle at the same time. Then immediately opposite he introduced a single thread by means of the curved needle before spoken of, and which subsequently became the ligature by being drawn through the opposite side by means of the loop. Thus it is seen that the loop was used simply as a vehicle for the single thread. The ends of the ligature were then carried out at the angles of the mouth and secured to the forehead by a strip of plaster, so as to keep them separate from each other, as well as from the sutures that were to follow. After this fashion, precisely, seven threads were introduced and tied in the same order, namely, from above downwards, the knot used to bring the edges together being the *simple slip*, made doubly secure with the *surgeon's knot*. The top suture, as might have been expected, was very tense, being chiefly in the hard palate, while the others brought the edges firmly together without the least difficulty. At the completion of the operation the fissure was perfectly closed in every part, even to the very tip of the uvula. The patient was ordered to bed, strict quiet enjoined, and a diet of beef tea and milk. As a mouth-wash, the following was given:

Potas. Chlor., ʒj.	Acid. Carbolic, gtt. xx.
Syrup, ℥ss.	Aquæ ad., ℥viij.

At the end of the fifth day following the operation Dr. Fenwick removed four alternate sutures, and in twenty-four hours after the remaining three. The result was most gratifying, although a portion large enough to admit the smallest pea remained unclosed at the top, where the greatest tension had existed.

She was discharged on the sixteenth day after admission with the understanding that she would return and have the operation completed.

Case II.—*Staphylorrhaphy.*

Catherine McPhail, aged twenty-three, was admitted into Dr. Fenwick's ward on the 13th November, to undergo the operation of Staphylorrhaphy for congenital fissure of the palate. The deformity was not so extensive, although the cleft was much wider and made a less acute angle than in the preceding case. The same preparatory treatment, with the bromide and the manipulation, were gone through, and on the tenth day she was thought ready for the operation. This was performed in almost precisely the same manner as the other, differing in these particulars only: five sutures were found sufficient; there was more difficulty in dividing the tensor palati muscles, and in order to bring the edges in apposition at the anterior portion or apex of the cleft it was found necessary to make a parallel incision on either side, and thus relieve the tension.

The same precautions respecting silence, food, &c., were enjoined as in the former patient, and a similar mouthwash was ordered. On the sixth day union had to all appearance taken place throughout the entire fissure, and three of the sutures were accordingly removed; but on the day following, while removing the uppermost thread, the edges separated, and we had the same gap, though not quite so large, as happened before. The remainder, to the very apex of the uvula, had, however, firmly united by first intention. The tension had apparently not been all removed by the parallel incisions, and the difficulty here was increased by the greater breadth of the apex of the fissure.

Both patients spoke in the manner so characteristic of this deformity; but as to any improvement in the articulation and speech effected by the operation, sufficient time has not yet elapsed to form any definite opinion on this point. Besides neither operation is yet completed. Years will, no doubt, as in the majority of such cases, elapse before they have ceased to speak in their original dialect.

The hæmorrhage was not great, but simply troublesome at either operation, and was readily controlled, from time to time, by means of ice held in contact with the bleeding surfaces. I have described the operation *in extenso* in connection with the first case, not only to make my report more complete, but to bring prominently forward the great advantage in this operation gained by the employment of sewing-machine needles, which, I understand

were first suggested in this connection by a medical gentleman at present practising in Montreal. In using them all expense and trouble in obtention are removed, as they can be either bought or borrowed in any hamlet in the country: so that with a couple of these, a curved needle, and a needle driver, all the apparatus for this operation is at hand.

Case III.—*Gun-shot Injury.*

James M., aged 36, labourer, while endeavouring to make peace between a man and his wife was shot by the former, the ball entering the front of the upper arm, at about the centre of the biceps muscle. He was immediately brought to Hospital and placed in one of Dr. Ross's wards. The point of entrance of the bullet was marked by a blackened and ecchymosed spot, but no opening of exit could anywhere be discovered. It had apparently been arrested in its course by the humerus, which was fractured in an oblique direction at the junction of the upper with the middle third. Careful examination failed to detect the foreign body. No vessels were injured, and the sensibility of the limb was unimpaired below the seat of injury.

The arm was put up in an angular internal splint of pasteboard, extending from the armpit to the metacarpo-phalangioal articulations, with, externally, a broad piece of gutta-percha splinting moulded to the shoulder and reaching beyond the external condyle, all well padded and secured by adhesive straps and a a bandage; a sling to support the hand only was, also applied. To the wound was applied simply a piece of lint well greased with lard.

At the end of a fortnight the dressing was removed. No signs of inflammatory trouble presented themselves, and the lint was barely stained with pus. Repair, however, scarcely began in the fracture, as the broken surfaces of the bone were readily moved on each other. The same dressing was re-applied.

At the end of the sixth week it was thought advisable to examine into the condition of the fracture. The splints being removed, Dr. Fenwick, who then had charge of the case, had the gratification to find that the wound had, to all appearances, been healed for some time, and that the fracture had firmly united and was surrounded by a heavy mass of callus. But what is still more interesting, immediately beneath the skin and opposite the inner aspect of the bone lay the bullet. A simple cutaneous incision was only required to expose and remove it. It belonged to the ordinary pocket-sized Smith & Wesson revolver, and was much flattened and indented, no doubt from its contact with the bone.

There is something further which might be reported in connection with this case. He had suffered for years from granular lids in both eyes, producing considerable shortening of the palpebral fissure, with entropion of all the four lids and consequent inturning of the lashes. He was anxious that something should be done to relieve his condition, so that Dr. Fenwick decided to perform an operation on the right eye for the relief of the entropion. Under chloroform he extended the outer canthus for about an inch, and brought the mucus membrane and the skin of each segment together by a couple of silk sutures. He then, with the scissors. removed, from the upper lid, an elliptical piece of skin, about three-quarters of an inch long by half an inch wide, and to make the eversion still more complete separated, with the knife, the skin from the cartilage at the margin of the lid, for a distance of about three-quarters of an inch. The edges of the ellipse were then brought together with silk sutures and the result seemed most satisfactory. Simple water dressing was applied.

On the fourth day after this simple operation he complained of headache, sore throat, general *malaise;* pulse, 100; heat of skin great, and feeling of stiffness about the face and eyes. The same evening he had a distinct rigor, and next morning the eyelid operated on was distinctly swollen and erysipelatous. He was ordered half-drachm doses of the Tinct. Ferri Muriat. every four hours, with hot fomentations of lead and opium locally. The disease extended over the entire scalp and down the back of the neck. The pulse on the fourth day of the fever was 130; temperature, 104 1-5; tongue dry; great difficulty in swallowing; at times low delirium. His condition was most precarious for a week, when the disease began as rapidly to subside, and at the end of a fortnight he was convalescent.

The circumstance of greatest interest in connection with this attack of erysipelas was the vast improvement noticeable in the condition of the eyes. It is true the erysipelas had not added to the result of Dr. Fenwick's operation; but the granular condition of the lids, and the chronic conjestion of the conjunctiva and cornea had almost disappeared. The entropion was much relieved, however, in the right eye, and in the left there appeared to be a change for the better. That erysipelatous inflammation is, then, one of the most reliable counter-irritants in chronic affections of the eyes there can be no shadow of doubt, and the experience of the staff of this hospital, at least, can fully bear out this assertion. The only pity is that it cannot be induced at pleasure, and modified to suit circumstances.

Reviews and Notices of Books.

A Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits. Illustrated by numerous Cases and Engravings. By William Roberts, M.D., Fellow of the Royal College of Physicians, London; Physician to the Manchester Royal Infirmary; Lecturer on Medicine in the Manchester School of Medicine. Second American from the second Revised and considerably improved London edition. 8vo; pp. 616. Philadelphia: Henry C. Lea. 1872.

The first edition of this valuable treatise, which appeared in 1865, has long since been exhausted, and in the preface the author states that when a new edition was called for he was unable to undertake its preparation, and that he regrets the delays which have postponed its appearance so long beyond the time originally announced.

Although disappointed at not seeing a new edition of Dr. Roberts' work, yet we have not lost anything by the delay, as the author has perseveringly followed up his subject. The plan of the work remains the same; all the chapters have been carefully revised, and very considerable additions have been made. Two new subjects have been added in this edition; one on the suppression of urine (anuria), which has been placed in the chapter on the physical properties of the urine; the other on "Hæmatinuria," or false hæmaturia, a condition which has been noticed by Oppolzer Vogel, Mettenheimer and others, in which the colouring matter of the blood escapes into the urine without rupture of the capillaries or the presence of blood corpuscles. Under such a condition the urine assumes a deep-red colour and presents to the superficial observer the character of bloody urine, but on more careful inspection no blood-disks nor fibrin will be found. This condition is invariably accompanied by the presence of albumen in the urine, and is noticed in those states of the system which is characterized by rapid destruction of the blood-disks in the blood-vessels, or what has otherwise been termed "a dissolved state of the blood," met with in some forms of what has been termed putrid fever, as in septicæmia, pyæmia, and extreme cases of purpura. Vogel ascertained that if arsenuretted hydrogen is inhaled it will occasion an intense but temporary hæmatinuria. He produced this condition of the urine in animals by making them

inhale arsenuretted hydrogen, or carbonic acid gas, or by injecting substances into the veins which are known to dissolve and break up the red corpuscles. Such is a general description of what our author terms hæmatinuria, but he specially calls attention to this condition as met with in a paroxysmal form, which appears to have been first noticed by Dr. George Harley, and subsequently by Dickinson, Greenhow, Gull, and others. The author gives an analysis of about twenty cases. Indeed, his account of this peculiar affection is based on what he has himself observed in cases which have come under his own charge, as well as on the cases above referred to.

The author draws attention to certain pigmentary particles which are observable under the microscope in fresh specimens of urine. They are especially numerous when there is a copious shedding of epithelium; but they do not appear to be associated with any particular kind of epithelium, but "appear indiscriminately with renal, vesical, urethral, and even vaginal epithelium." They appear under two conditions, as free amorphous particles or irregular cell-like bodies. They present a reddish-brown or orange colour, and vary in size from mere specs to particles larger than pus globules. These pigmentary particles we have frequently noticed in examining specimens of urine, and always deemed them to be of extraneous origin, as we have never seen any description hitherto. These particles keep badly, and entirely disappear as decomposition sets in. They possess no special pathological significance, but are found to be numerous in the urine of Bright's disease. Dr. Roberts states that he has met with similar objects far removed from the urinary passages, as in the brain, in the neighbourhood of old apoplectic clots; in encephaloid growths and other tumours. From these circumstances he is led to regard them as derivatives of hæmatin, but he cannot account for their peculiar forms.

In speaking of albumen, the author remarks that "albumen is "not found in any proportion in healthy urine: but it is the most "common and the most important of the abnormal ingredients "found in disease. Its presence in the urine is due to so many "causes that the fact itself yields little direct information; but "when correctly interpreted, it furnishes several grave pathologi-"cal states which would otherwise remain in great obscurity."

In testing for the presence of albumen the author points out the various circumstances which may mislead in a careless investigation. Full directions are given touching clinical manipulation, and further on is considered the various methods employed for estimating the quantity of albumen present:

"Slight and temporary albuminuria appears to occur, in highly "exceptional cases, from very slight disorders.

"Setting aside these unimportant exceptions, albuminuria must "always be looked on as a grave symptom of disease; and when "discovered, it becomes an anxious question to the practitioner: "What signification has it?

"The pathological states in which albumen appears constantly "or occasionally in the urine may be arranged into the following "groups:

"1. Acute and chronic Bright's disease of the kidneys.

"2. Pregnancy and the puerperal state.

"3. Febrile and inflammatory diseases (zymotic diseases, such as "scarlet fever, measles, small-pox, typhoid, cholera, yellow fever, "ague, diphtheria, &c.; inflammatory diseases, such as pneumonia "peritonitis, traumatic fever, articular rheumatism, &c.).

"4. Impediments to the circulation of the blood (emphysema, "heart disease, abdominal tumours, cirrhosis, &c.).

"5. A hydræmic and dissolved state of the blood and atony of "the tissues (purpura, scurvy, pyæmia, hospital gangrene); also "hæmatinuria.

"6. Saturnine intoxication.

"In the first group albuminuria is dependent on structural "changes in the kidneys.

"In the second group albuminuria is sometimes associated with "structural changes, and sometimes not.

"In all febrile and inflammatory complaints a trace of albumen "is occasionally found in the urine; it usually amounts to no "more than a trace, and disappears on defervesence; sometimes "in pneumonia it is not inconsiderable.

"Albuminuria connected with impediments to the circulation of "the blood is considered under Congestion of the Kidney.

"In a dissolved or putrid state of the blood, albumen appears "in the urine without being connected with organic changes in "the kidney; it is associated with the escape of the colouring "matter of the blood.

"The occurrence of albumen in the urine of persons poisoned "with lead, although repeatedly observed, was not regarded as "anything more than a coincidence until Olivier demonstrated, "by experiments on animals and clinical observations, the exist- "ence of a casual connection between them. Olivier found that "dogs, rabbits, and guinea-pigs, when poisoned with repeated "doses of carbonate of lead, invariably passed an albuminous "urine, and that their kidneys exhibited signs of incipient organic "disease."

We must draw this hurried notice to a close, as already we have exceeded our allotted space. We notice that the author has somewhat improved the wood engravings, and twenty extra cuts have been added. On the frontice page we find a coloured plate, giving nine different varieties of shade, from a pale yellow to a brownish black. We trust our author does not suppose that all his readers are colour blind, and that he finds it necessary to place before them a guage, by reference to which they can judge of the different colours of different specimens of urine. To our mind it does not impart what it is evidently intended to illustrate. Throughout, the work is clear and very readable; indeed the style is most happy. We cordially recommend it to our subscribers as being thoroughly practical, and containing much information which is not to be met with elsewhere.

The Pathology, Diagnosis, and Treatment of Diseases of Women, including the Diagnosis of Pregnancy. By GRAILY HEWITT, M.D., Lond., F.R.C.P., Professor of Midwifery and Diseases of Women, University College, and Obstetric Physician to the Hospital; &c., &c., &c. Second American from the third London edition. Revised and Enlarged. With One Hundred and Thirty-two Illustrations. 8vo; pp. 751. Philadelphia: Lindsay & Blakiston. 1872.

This is the second American from the third London edition, and has received such a thorough revision that it must be regarded, as the author states in his preface, "as substantially a new work." The three editions of the work differ materially. In the first the author considered the then existing state of uterine pathology. In the second edition he announced views of an improved system of uterine pathology, based on his own researches. This was amply illustrated by what he had himself observed. In the present edition the author gives certain generalizations on important questions of the pathology of uterine diseases which have forced themselves on his attention in the course of several years experience, and which lead to the adoption of views in reference to the pathology and treatment of uterine disease different from those announced in the earlier editions of the work. The mechanical system of uterine pathology is enunciated, which the author declares is no "speculative theory"; but, although long convinced of the correctness of his views, he states that had he published them when first conceived they would have been a "speculation only." The author states, in reference to this subject, that "the "system, as now enunciated, commends itself to my judgment as "true, inasmuch as I have found it in conformity with daily obser-

"vations for five or six years past." Thus it will be observed how careful the author has been to convince himself of the correctness of his views, which he has gradually but steadily elaborated during a somewhat extensive clinical experience at University College Hospital. Hence they come to us with the full weight of careful observation, which adds much to their value.

Although admitting freely that Dr. Hewitt is a keen observer, and has enjoyed unusual opportunities of studying these lesions, yet we cannot regard, as correct, his theories of the origin of uterine affections. In plain terms, our author seems to attribute all structural lesions in the cervix and body of the uterus as arising primarily in alterations in the form of the uterus itself, which are described under the general heading of flexions. He says:

"Patients suffering from symptoms of uterine inflammation (or, "more properly, from symptoms referable to the uterus) are "almost universally found to be affected with flexion or alterations "in the shape of the uterus of easily-recognized character, but "differing in degree.

"The changes in the form and shape of the uterus is frequently "brought about in consequence of the tissues of the uterus being "previously in a state of unusual softness, or what may be correctly "designated as chronic inflammation.

"The flexion once produced is not only liable to perpetuate "itself, so to speak, but continues to act incessantly as the cause "of the chronic inflammation present.

"Logically, and, indeed, practically, there are good reasons for "placing flexions first in the order of sequence."

It is certainly not the case, so far as we have been able to observe, that "symptoms referable to the uterus" are invariably associated with flexion or alteration in the shape of that organ. That flexions or alterations in position are of more common occurrence than is supposed we freely admit; the ease and facility of diagnosis is likewise well known; but we cannot agree with the author that these malpositions are met with in all cases in which there exist symptoms referable to the uterus. Nor can we admit the proposition that there "are good reasons for placing flexions first in the order of sequence." This is to presuppose that no cases of uterine catarrh, or by whatever name it is designated, can exist, save and except when some flexion or malposition has been the starting point. However true it may be that flexions and malpositions of the uterus will be attended with congestion of the vessels leading to a chronic inflammatory state, with its attendant evils, yet we cannot admit, as correct, that the *origo mali* is the uterine displacement.

The work consists of thirty-two chapters, with a supplementary chapter on sterility. It is beautifully illustrated with one hundred and thirty-two wood engravings, some twenty of which are new. For the most part these engravings are original, being representations, carefully planned, of cases which have come under the observation of the author in the wards of University College Hospital. Although we differ with the author in many of his views, chiefly as referring to the origin of uterine affections, yet we cannot but speak in the highest terms of the work itself. The style is clear and very readable, and it gives evidence throughout of honest, hard work; not that of the office book worm, but of the careful clinical observer.

Surgical Diseases of Infants and Children. By M. P. Guersant, Honorary Surgeon of the Hôpital des Enfants Malades, Paris; Honorary Member of the Société de Chirurgie, etc. Translated from the French by Richard J. Dunglison, M.D. 8vo.; pp. 354. Philadelphia: Henry C. Lea. 1873.

This is a translation, by Dr. Richard J. Dunglison, of M. Guersant's notes on the surgical diseases of children. It can hardly be termed a treatise, and does not bear comparison with Timothy Holmes' excellent work on this subject. The author states that his object "has not been to embrace the entire domain of infantile surgery, but he desires only to record his views on cases which have most frequently come before him, and which he has used as subjects for his Clinical Lectures at the *Hôpital des Enfants*, from 1840 to 1860. We should suppose that during a lapse of twenty years a lecturer on clinical surgery at a large Parisian hospital would have had ample opportunity of observing the vast majority of surgical cases to which childhood is liable. It appears, however, that some departments, or rather some accidents and diseases presented so seldom, that the author hesitated in giving of them a casual and imperfect sketch. The work then (what there is of it), must be regarded as affording the deductions and practical observations of the author on subjects which have frequently come before him.

The arrangement, of necessity, is rather rambling; for instance, chapter two is on "Cervical Adenitis"; this is followed by a chapter on "Phymosis"; chapter six, on "Hypertrophy of the Tonsils," is followed by a chapter on "Polypus of the Rectum"; "Irrigation of the Pharynx" is succeeded by a chapter on "Vulvitis of Young Children." Then we have Cataract, Abdominal Hernia and

Leucorrhœa, Chilblain, Traumatic Dislocations, Erysipelas, and so on. Throughout, all the subjects treated of are jumbled up, which detracts very materially from the worth of the book. The style is very practical, the author confining himself to what he has himself done in the way of operative procedure. He does not refer to the methods of operation adopted by other authorities, and on some subjects no allusion is made to many valuable modern improvements in the way of treatment. The editor has performed his work well, and deserves the thanks of his professional brethren in affording a faithful translation of a book which is, at least, the practical deductions of an eminent observer of considerable experience.

BOOKS RECEIVED FOR REVIEW.

Contributions to Mental Pathology. By I. Ray, M.D., author of the "Medical Jurisprudence of Insanity" and "Mental Hygiene." 8vo.; pp. 558. Boston: Little, Brown and Company. 1873.

Clinical Lectures on the Diseases Peculiar to Women. By Lombe Atthill, M.D., Univ. Dublin; Fellow and Examiner in Midwifery, King's and Queen's College of Physicians, &c., &c. Second edition; revised and enlarged; with six lithograph plates and wood-cut illustrations. 8vo.; pp. 241. Philadelphia: Lindsay & Blakiston. 1873.

Peculiarities in the Operations of the Great Ovariotomists: Wells, of London; Atlee, of Philadelphia; and Thomas Keith, of Edinburgh. By S. Fitch, M.D., Edin. Pamphlet; pp. 16. Philadelphia: J. B. Lippincott & Co. 1872.

Fœticide; or, Criminal Abortion. A lecture introductory to the course on Obstetrics and Diseases of Women and Children, University of Pennsylvania. By Hugh L. Hodge, M.D. Fourth edition. Pamphlet; pp. 55. Philadelphia: Lindsay & Blakiston. 1872.

Transactions of the Obstetrical Society of London, Vol. XIII, for the year 1871; *with a list of Officers Fellows, &c.* 8vo. pp. 335. London: Longmans Green & Co. 1872.

Wöhler's Outlines of Organic Chemistry. By Rudolph Fittig, Ph. D., Nat.Sc.D., Professor of Chemistry in the University of Tübingen. Translated from the eighth German edition, with additions by Ira Remsen, M.D., Ph.D., Professor of Chemistry and Physics in Willams College, Massachusetts. 8vo.; pp. 530. Philadelphia: Henry C. Lea. 1873.

Surgery.

ABSTRACT OF A LECTURE ON THE EXCISION OF THE KNEE-JOINT.

By T. Holmes, F.R.C.S., Surgeon to St. George's Hospital, etc.

Although, gentlemen, the short time allowed for the course of lectures on systematic surgery obliges us to be very dogmatic, there are, in truth, two sides to almost every surgical operation; and it seems to me that the chief value of these clinical lectures is, that they allow us to explain, separately, these debatable points at greater length, and with the aid of illustrative cases. Excision of the knee-joint is just such a point. It is not many years since it was first performed by Sir William Fergusson, and the number of cases operated on is even now not sufficiently large to enable us to judge of the results with perfect satisfaction. It is only lately, too, that the conditions under which the operation can be favourably performed have been at all clearly defined. In the early days of excision of the knee, the operation was performed on patients advanced in phthisis, or for malignant tumour. No English surgeon would now consider this justifiable. Yet, though the operation has, even now, scarcely passed beyond the experimental stage, its employment has been advocated and condemned with a partisanship which is, I think, quite out of place in such a controversy.

The operation has, indeed, its advantages and its disadvantages. In considering these, it has been the fashion to compare it with amputation; but we must also compare it with an expectant treatment and conservation of the limb.

Disadvantages.—The *shock* of the operation is very severe, and it is followed by severe surgical fever. After amputation for disease in the child, there is usually but little shock or fever; the child often sleeps soundly a few hours after the operation, and mends steadily from that time. The shock and suppurative fever after excision are, however, not often fatal.

Arrest of Growth in the Limb after the Operation.—This is rather common; it is due to the removal of the whole of the epiphysis and part of the shaft of the bones. In the femur, the epiphysal lines come very close to the edge of the cartilage, and, consequently, the risk of removing the epiphysis is great. In some cases this can be avoided by merely slicing off the cartilage, and

leaving a rounded or truncated end to the bone; but often, owing to the extent of the disease, a horizontal cut is absolutely necessary. In the tibia, the space between the articular surface and the line of junction of the epiphysis is greater, and, consequently, there is a better chance of being able to save part of the latter. Of course, the younger the patient the greater would be the relative shortening from this cause.

The Risk of Soft Union between the Bones and of Bad Apposition.—The tibia has always a great tendency to fall back, so that only the anterior part of the cut surface is in apposition with the femur, and the partial union thus formed is not strong enough to support the weight of the body; or, if the cicatrix be stronger, it may yield gradually to the weight of the trunk, and the limb may bow outwards, giving it a shortened and awkward appearance. These deformities may be corrected by splints if treated at once, and, unless the shortening and bending be excessive, the limb is still better than a wooden one. A shortening of six inches, compared with the sound limb, is no great hindrance to walking; the pelvis drops on that side, and this obliquity, with a high boot, readily compensates for the shortening.

These, then, are minor disadvantages; the real obstacles to the operation are its severity, the tedious convalescence which follows, and the liability to recurrence of the disease.

It is very difficult to judge of the comparative mortality after excision of the knee; statistics especially are very fallacious. It is not sufficient to compare the total mortality after excision with the total mortality after amputation. Even the most enthusiastic surgeons limit their practice of excision to young patients and to favourable cases, while amputation is performed at all ages, and often under desperate circumstances. Excision, again, is never done for cases of acute injury; in military surgery it has been exceedingly fatal. To arrive at any satisfactory result, we must compare *similar cases* in considerable number; and this is not an easy matter. I believe myself that the mortality after excision is about double that of amputation. I should say, too, that the period of convalesence is about four times as long after excision as it is amputation. This estimate is, if anything, rather below the mark.

The risk of recurrence of the disease is not great when the wound heals rapidly; but, if convalescence be prolonged, a renewal of the caries often results. And when this does happen, do not be in too great a hurry to amputate; treat it as you would caries in the continuity of a bone; there is now no joint to complicate the treatment. Scrape out the diseased bone or apply caustics; if

this do not answer, you can excise again; though this, of course, increases the shortening.

The *couleur de rose* doctrines which have been advanced by some surgeons have certainly produced very mischievous results. Excision is not an operation which can be applied indiscriminately; it must be reserved for cases of favourable age, and in which the disease is not too acute or too extensive. When it is thus reserved for suitable cases, the result is infinitely superior to that of amputation. The advantages, indeed, are more marked the earlier the age of the patient.

Amongst the lower orders, amputation of a leg almost ruins a child's prospects for life; few will have anything to say to him, and the greater part of his life is passed at the cripples' home and the workhouse. But after excision he is fit for a sedentary or even for a moderately active life. I have known patients who could easily walk ten and fifteen miles a day after excision; and a German surgeon has recorded the case of a man who was able to follow successfully the arduous profession of a chamois-hunter after this operation. After middle life, the advantages are doubtful. The result of the operation is not generally so good, and an adult can seldom afford the long period necessary for convalescence. The complete use of the limb, after excision of the knee, is not fully acquired for some years.

On the other hand, the number of cases which are available for excision, even in the child, are limited by the fact that many of them are curable without any operation, if you can only give them time. In private practice, amongst well-to-do people, where the parents will readily nurse a child for three or four years, you may cure cases of abscess in the knee-joint, or even of chronic disease of the bones, by means of simple expectant treatment, and may even get a tolerably useful joint. In hospital practice this plan of treatment is impracticable, and then it is that, by excision, you can hasten and facilitate the process of cure without materially altering the nature of the result.

On the whole, then, whilst I fully recognise the advantages of excision, I am strongly in favour of the close restriction of the operation to a limited class of cases.

So far, we have been dealing with the operation in the abstract. We have now to consider, more particularly, the principles which should guide us in the selection of cases, the best mode of performing the operation, and the necessary after-treatment.

Age.—The patient must be under forty or forty-five. The elbow or shoulder may be successfully excised at a much greater age; but, after middle life, excisions in the lower extremity are exceed-

ingly fatal. In the case of very young children, free incisions into the joint and expectant treatment are so successful, that formal excision is seldom necessary: the risk of getting an excessively shortened limb is also very great. This is not absolute contra-indication, since excision may be, and has been, practised successfully in early infancy: but the most favourable age for the excision of the knee may be said to be between five or six and twenty. The operation may, however, be performed, with fair hope of success when the other circumstances are favourable, as late as thirty or even beyond.

Constitutional State.—There must be no visceral disease. The lungs must be examined for signs of phthisis, and the urine for evidence of the albuminoid kidney, which often accompanies chronic disease of the bones; nor should examination of the liver be neglected. There must be no acute surgical fever, and no marked depression of the general health: no great wasting or confirmed hectic.

Local State—a.—The bones must not be too extensively softened. Unless you can remove all the softened bone, you will be almost sure to get soft union or no union at all. In excision of the elbow, and even of the hip, this objection does not hold good—you do not want to get firm osseous union, as you do in the knee. In many cases, it is quite impossible to diagnose the actual state of the bones before the operation; you must, therefore, always be prepared to change your excision into an amputation, and must always previously obtain the consent of the patient or of his friends to this course, if necessary.

One of the most favourable classes of cases for excision are those of so-called "strumous" disease of the synovial membrane, though the patient often shows no sign whatever of the strumous diathesis. It is characterised by purely degeneration and thickening of the synovial membrane, and by the frequent presence of small abscesses in the thickness of this pulpy mass, which may or may not have burst into the joint; the bones are scarcely affected at all. The operation also is exceedingly simple in these cases; you need not be particular about removing all the thickened synovial membrane, and have only to remove a thin slice of bone and cartilage from the articular surfaces.

Then there are the cases where a superficial necrosis of some part of the articular surface has taken place, and a sequestrum has formed. In some of the other joints you may just remove this sequestrum, and trust to rest, etc., but in the knee this procedure is followed by such severe shock and profuse suppuration that it is better to excise at once.

b. The disease must not be of too long standing, and the limb must not be too much atrophied. In children especially, if the disease has lasted for any considerable time, there is great risk that it may have extended beyond the epiphyses, and that the operation would, consequently, be followed by arrest of growth in the limb.

c. The soft parts must not be too extensively undermined.

d. The disease must not be in an acute stage. I have seen excision successfully performed for acute abscess in the knee-joint, but, as a rule, the operation under these circumstances should be discountenanced. This rule also does not hold good in the case of other joints, especially of the elbow, where excision may be safely recommended in the acute stage of abscess.

It will thus be seen that the most favourable cases of disease of the knee-joint are those which are selected for excision, whilst the more unfavourable are left for amputation, and that this, therefore, tends to increase the mortality after amputation. Some have argued that the tendency is to some extent neutralized by the fact that, since the introduction of chloroform, amputation has been performed in many favourable cases of old deformity, etc., which would formerly have declined the operation. This may be true, but, on the other hand, a far larger number of favourable cases are saved by conservative surgery of the present day, which would formerly have undergone the operation; so that I do not doubt that, on the whole, amputation for disease is now practised in a class of cases less favourable for recovery than was formerly the case.

The *operation* itself is tolerably simple. Some surgeons, as Mr. Butcher, still adhere to the H-shaped incision; this, however, is rarely required—only when a joint is ankylosed in awkward position, or when you wish to expose the bones very freely. Others make a large anterior flap, enclosing the patella; the only advantage of this is that you can at once amputate, if necessary, without removing much of the femur; the objections are, that there is a large hollow left after the removal of the patella, and that the wound is larger, and, consequently, the shock is increased and convalescence retarded.

Langenbeck, I believe, operates, or used to operate, on a totally different plan, and with a different object in view. He makes a longitudinal incision down each side of the joint, divides the lateral and crucial ligaments, and turns the articular surfaces out through one of the wounds. He leaves the patella and its ligament entire; his object being to get a moveable joint, while we are for firm ankylosis. I have no experience of Langenbeck's treat-

ment, but, from my own experience, should always advise the removal of the patella, or, at all events, of the whole of its cartilaginous surface. When the patella is left it often becomes the seat of the recurrence of the disease, and if the bones are to be firmly united and soldered together, there is no advantage to balance this risk. You will see by the examination of such cases several years after recovery, that the quadriceps extensor curis becomes atrophied, and the function of the patella entirely abolished.*

I think, then, that the best plan is to make a single straight incision from the back of one condyle to the back of the other, cutting across the ligamentum patellæ, and completely dividing both lateral ligaments. After turning up and removing the patella, the limb is well flexed, the back of the condyles cleaned, and the lower part of the femur sawn off nearly perpendicular to the axis of the bone; the head of the tibia is then cleaned and sawn across horizontally. The danger to the popliteal is not great, unless it be bound down to the back of the bones—glued to them, as it were, by inflammatory products; nor is there any motive for sawing the femur from behind forwards, as has been recommended.

Be very careful to tie all bleeding points. I always use the carbolised catgut ligatures, and cut off both ends quite short; the knots do not interfere in the least with rapid union. I find this much more satisfactory than torsion, especially for small vessels.

Put up the limb at once, before the patient recovers from the chloroform. There are several different forms of apparatus. The limb should be perfectly straight, and the splint should be carefully adapted to it. The plaster of Paris splint is very good; the best form is that of Dr. Patrick Watson, a description of which is inserted in the "System of Surgery." The objection is that, if the limb become inflamed and swells, you have at once to take it all down; and if, as sometimes happens, the limb shrinks, the splint allows it too much motion. The same objection applies in some degree to Mr. Butcher's apparatus; this consists of a sort of trough, formed by three flat wooden splints, open in front. In this hospital we usually use a McIntyre's splint, cut away at the sides opposite the joint. Wooden side splints are applied to this, and a well moulded leather splint is fitted over the front of the thigh.

Whatever apparatus you use, do not disturb the limb oftener than you are absolutely obliged; perfect rest is the great point of the after-treatment. If you can avoid any changes for four or five

* See an illustration in Holmes' "System of Surgery," vol. v., page 708. Second edition.

weeks, so much the better; by that time there will probably be a sufficient amount of union between the bones to dispense with all special apparatus for the future.

Do not allow the patient to use the limb too soon, and watch him for some little time after he begins to move about on it, so that you may at once check and correct any tendency to bending or bowing at the seat of union.—*British Medical Journal.*

NOTES ON DISLOCATIONS.

By J. Hancocke Wathen, L.R.C.P.E., M.R.C.S. Eng.

Two cases of rare dislocations—viz., those of knee and sternal end of the clavicle.—under the care of Mr. Samuel Hey, having been reported in these columns for November 2, I have thought the notes of the following cases worthy of record :—

Case 1.—*Compound Dislocation of the Knee-joint—Recovery with nearly Perfect Movement of Joint.*

E. T., aged 36 years, until lately an agricultural labourer, healthy, came under observation on January 26, 1868, when he gave the following history :—He was present at the Gadley's colliery explosion, which occured in the first week in October, 1867. A huge block of coal fell on him, striking the left thigh on the outside just above the knee. When brought to the surface it was found that his thigh-bone protruded through a wound on the inner aspect of knee joint, the limb being flexed. The three centre toes of the same limb were crushed, which necessitated their being amputated. The state of the patient at the time of observation was the following :—He had lost the three centre toes of left foot; on the inner aspect of knee of same side was a cicatrix about three inches and a half long, extending from a point immediately above the internal condyle, downwards and outwards, terminating just below the patella. Over the outer condyle there were three or four small irregular cicatrices.

The patient further stated that the surgeon was able to pass his finger across the joint from inner to outer wounds. Reduction was affected, the limb placed on a back splint, three sutures introduced along the inner wound, and cold water dressing kept constantly applied. Considerable suppuration took place, discharging principally through the wounds on outer side of knee. At the end of six weeks all support was taken off, and patient directed to commence passive movement of joint; and now (January 26), three

months after the receipt of the injury, he has nearly complete movement of the joint. Extension is perfect, and flexion can be made up to a right angle. From the patient's description further flexion is prevented by the anterior aspect of the joint being bound down by adhesions.

On applying for information in this case to Mr. D. Davis, of Aberdare, under whose care the patient made such a satisfactory recovery, he writes that he perfectly recollects the case, and that the patient's description of his state is correct. Mr. Davis adds that his experience of compound dislocation of the knee-joint is considerable, ten such cases having occured to him, eight requiring amputation; two only out of the ten recovering, of which the present case is one. (Mr. Davis does not mention whether the remaining case of recovery was one in which amputation had to be resorted to, or not.)

Case 2.—Simple Dislocation of Knee-joint—Recovery with Fibrous Anchylosis.

This case occured in the person of Mr.—, aged 47 years, a medical man, a near relative of mine, whose horse, while driving, became suddenly restive, and bolted. Mr.—, who was driving a two-wheeled dog cart, finding the horse's feet come into uncomfortable proximity, determined to jump out. He alighted with his left foot partly on the raised footpath on the roadside; the ankle being forcibly driven backwards, the tibia became dislocated from the femur in the direction forwards and outwards; the limb was somewhat flexed. Some passers-by, under Mr.—'s instructions, made extension, by which reduction was easily effected.

The case was at first seen by my friend Mr. E. P. Philips, of Haverfordwest, who kindly undertook the care of it during my absence from home. The limb was placed on pillows, with lateral splints, which were changed after some days for a M'Intyre, and swung in a Salter's cradle. This patient was a martyr to ill-developed gout which very much influenced the case; considerable inflammatory, action came on in the knee-joint; this was relieved by poppy fomentations. Without going into a detailed account of the case, I may state that after running the gauntlet of an attack of hæmaturia and cystitis, together with two or three little accidents when just convalescent, which set up secondary inflammatory action in the joint, the patient recovered with a stiff knee. At present five years after the accident, there is some little mobility in the joint, but Mr.—walks, with a straight leg, at a pace that few with free movement of joint can outdo.

Case 3.—Dislocation forwards of the Sternal End of the Clavicle.

David J., aged 16 years, presented himself on August 20. He stated that some three hours before he had tumbled off a load of hay, falling on the left shoulder. On being stripped the left shoulder was seen to be approximated towards the mesial line. Over the sternal end of the clavicle there was a considerable prominence, which was easily made out to be the dislocated end of the bone. Some tumefaction was present. The bone was brought into position by drawing the shoulders outwards and backwards, and a posterior figure-of-eight bandage applied. As the bone became displaced very readily, a large pad and a similar bandage were applied anteriorly over the displaced end of the clavicle. The difficulty of keeping the bone in position, and the fact of the boy living some seven miles away, as well as his inabilty to obtain perfect rest, did not lead me to anticipate a satisfactory result. Every time the boy visited me the whole affair was found out of gear. I saw him a couple of weeks ago, when I found the end of the clavicle somewhat prominent, but of no inconvenience, as he could use his arm as well as ever.

Remarks.—The case of E. T. was evidently one of dislocation of the tibia backwards and outwards, with protrusion of the femur through the wound on the inner side. It is of interest as affording a sample of so complete a recovery after compond dislocation of this articulation, even when treated, as I believe, on simple antiphlogistic principles. These cases have hitherto too frequently called for amputation, the soft parts being, as a rule, so much lacerated; but, armed as we now are with the principles of antiseptics, we may, I think, look for more satisfactory results than were obtained before. The influence of the state of health on the ultimate result is shown by a comparison of cases 1 and 2. On account of the shallowness of the articulation, it is nearly impossible (according to Professor Erichsen) to prevent a return of the displacement in cases of dislocation of the sternal end of the clavicle. Should we be unsuccessful, it does not appear to make any appreciable difference to the patient, except it be a female, who would hardly forgive one for allowing such an irregularity to exist. In these cases it would be advisable to insist on the patient keeping her bed, as has been recommended in fracture of the clavicle in women.—*Medical Times and Gazette.*

CRITICISMS OF DR. CHAUVEAU OF LYONS ON THE DISCUSSION AT THE PATHOLOGICAL SOCIETY ON PYÆMIA.

By J. BURDON SANDERSON, M.D., F.R.S., Professor of Practical Physiology in University College.

I have to thank the Editor of the *British Medical Journal* for having called my attention to a recently published criticism, by my friend Dr. Chauveau of Lyons, of my communication to the Pathological Society last April on the subject of pyæmia. The criticism in question forms an Appendix (entitled "Le poison pyohémiqne à la Société Pathologique de Londres") to a course of lectures on the Physiology of Infective Liquids, which has been published during the last three months in the *Revue Scientifique*. In these lectures the author has embodied the results of a lengthened and most important experimental inquiry, which in its general bearing somewhat resembles that in which my colleague Dr. Klein and I were engaged last winter. M. Chauveau's purpose is to demonstrate the close relation which exists between the virulent (or, as I prefer to call them, the infective) diseases and ordinary inflammation. He founds this *rapprochement* mainly on the resemblance between the irritant properties of inflammatory products, and those of the specific morbid poisons; and asserts that ordinary pus induces inflammation in any living tissue with which is is brought into relation, in the same way that a virus reproduces the disase from which it originated under similar conditions. Those of M. Chauveau's experiments which have to do with recent—*i.e.*, living—inflammatory products are in close relation with ours. But, in addition to these, he has made others in that older field of inquiry which concerns the toxic action of pus in various degrees of putridity.

Knowing as I do, by personal intercourse with M. Chauveau, the extreme accuracy of his method of working, and regarding myself as in some measure his pupil (for there are few men from whom I have learnt more pathology), I felt perfectly certain, as soon as I found that we were on the same ground and lookind in the same direction, that, if there were disagreement between us, it could only arise from the imperfect manner in which the facts had been presented on one side or the other—in this case on my side.

At the Pathological Society, I founded what I had to say on an entirely new experiment, which I then regarded, and still regard, as a fundamental one. It is to this experiment, or rather to my interpretation of it, that M. Chauveau objects. I shall have no difficulty in showing that his objection arises from a misconception. He describes it in terms which (with the important exception of

the words I have put in italics) are correct : " If a pyæmic liquid, introduced into the peritoneal cavity of a guinea-pig, be left there for a couple of days, *during which it does not determine any intense symptom in the animal*, the toxic power of that liquid, increases to such a degree that, when taken from the first animal and transported to a second, it manifests the most pernicious activity, and produces symptoms which are very rapidly fatal." This, M. Chauveau adds, was demonstrated to the Society in a " dog, into the abdominol cavity of which six drops of a pyæmic liquid which had resided two days in the peritonead cavity of a guinea-pig had been injected."

M. Chauveau expresses no doubt as to the strict accuracy of the facts, but thinks I have misunderstood them, and proceeds to recite an experiment of his own, which appears to him to furnish the key to mine. It is as follows. An old horse was sent to the veterinary school with a seton, the discharge from which was extremely fætid ; the animal, however, was in good health ; pulse, 32 ; temperature in rectum, 99.7 deg. Pus was collected from the seton, diluted with twice as much distilled water, and strained. Of this liquid, 15 minims were injected subcutaneously on the right side into the neck of the same animal from which it had been taken. In twenty-four hours, the pulse had increased to 45 and the temperature to 101.8 deg. On the fourth day the animal died. There was an enormous diffuse swelling around the seat of injection, due to " œdematous gelatiniform infiltration " of the subcutaneous tissue. The swelling was gangrenous at the centre, and exhibited elsewhere patches of vascular engorgement or extravasation. There were no internal lesions. Thus, to quote M. Chauveau's own commentary on the facts, " a few drops of the same pus, which when contained in a pyogenic cavity occasions neither local irritation nor any appreciable general disturbance, when injected into the cellular tissue of the same animal destroys it in less than four days ; and the inflammation thereby produced is of so violent a character that the circulation stops, hæmorrhagic *infarctus* are formed, the tissues die, and the animal succumbs to poisoning caused by the absorption of the putrid products engendered by this gangrenous phlegmon". The experiment is of great interest, and, as Chauveau says, well worthy of the attention of the surgeon, but it is too widely different from ours to admit of comparison with it. To make this difference evident, all that is necessary is to refer to the professed purpose for which it was made. M. Chauveau's object was, to use his own expression, to investigate the action of " pus putride "—*i. e.*, of stinking pus Our object, on the contrary, was not to inquire into the properties

of putrid liquids, but of the products of inflammation; and for this reason, the most fastidious care was used to avoid the introduction of the element of putridity at any stage of our experimental procedure, by preserving our liquids from the possibility of septic contamination. In the first inoculation, the "pyæmic liquid" (as M. Chauveau calls it) used was simply the product of an acute inflammation, produced by the subcutaneous injection of a chemical irritant. This liquid was introduced into the peritoneum of a guinea-pig in extremely small quantity, and produced there an intense peritonitis. It was the product of this peritonitis which exhibited that extraordinary virulence, which I sought to illustrate to the Society by the experiment shown. In describing the results, I applied to them the term *intensification*. To this term M. Chauveau objects, and reasonably enough, for for he supposes that in using it I meant to imply that in the case of the guinea-pig which received the first product and yielded the second, the former was *intensified* by mere residence in the uninflamed peritoneum of a healthy animal. I need scarcely say that this was not what I meant. In using the word *intensification*, I meant to apply it, not to the liquids, but to the *process* which produced it; for obviously the infective liquid finally obtained is not the same with that which was first injected but simply the product of the inflammation excited by it—*i.e.*, of the peritonitis. Its virulence, its infective activity, depends not on the mode in which the inflammation originated, but on the actual intensity it had acquired during the forty-eight hours of its duration.

There is one other point in M. Chauveau's paper to which I would ask space to refer. He objects strongly to my statement "that the ordinary bacteria of putrefaction do not in themselves possess a toxic action, and that liquids containing them can be injected into the circulation of a living animal without producing any effect." The statement, as it stands, is perfectly correct. Bacteria of putrefactive origin, if cultivated in liquids which are themselves innocuous, can be injected into the veins without producing disturbance. It was suggested that in all poobability the same thing would hold good of the bacteria of infective origin; but it was not stated either that the organisms of an infective liquid would, if they could be separated from it, be innocuous or inactive, or that the liquid without its organisms would retain activity. As a result of these considerations, the opinion was expressed that, although these living particles are probably the carriers of infection, there is as yet no sufficient ground for supposing that their existence is the essential condition of infectiveness of certain products of inflammation.—*British Medical Journal.*

Materia Medica and Chemistry.

ON ANÆSTHETICS.

By WILLIAM ALEXANDER, M.D., F.R.C.P., Senior Physician to the Halifax Infirmary and Dispensary.

The general subject of anæsthetics, to which the *Journal* prominently calls the attention of the profession at this moment, is second to none other in its importance and practical value; and, having had frequent opportunities of witnessing the relative merits of nearly all these agents, and having introduced the hydrate of chloral from Berlin, I have to offer a few reflections as my mite to the appeal of the editor.

During 1847 and the two or three following years, we used ether inhalation at the Infirmary here, and privately pretty generally, without any ill result. We found it very apt to occasion cough and a sense of suffocation, which might probably have been obviated had the patient previously practised with the mouthpiece, and had an anhydrous preparation been employed. Total oblivion was with difficulty obtained, and the cerebro-spinal reflex action never utterly lost. The volatile liquid used had about 85 per cent. of ether, with a gravity of 0.750, and was given in half-ounce quantities every two or three minutes until the desired effect was induced. Its stimulating, intoxicating property was often very often conspicuous, as evinced by very profane ejaculations. As with chloroform, I look to the respiration rather than the pulse, and see that the heaving of the chest is properly performed, voluntary suspension of that function being commonly attempted whilst consciousness remains. No doubt the pulse must be carefully watched, since paralysis of the cardiac ganglia and pneumogastric nerve is unquestionably the customary cause of death.

For etherisation, Morgan's inhaler, used at Mercer's Hospital, would probably answer better than that of my late friend, Dr. Snow, as it altogether obviates the dilution of the vapour by atmospheric air, and thus earlier secures the object desired; but the conical towel and sponge, or even folds of lint, supply a ready method and answer the purpose. An empty stomach is desirable, though after-sickness very rarely follows, and the somnolent effect soon vanishes.

So far as is yet ascertained, the percentage of accidents is very greatly in favour of ether. Dr. Jones, who was a great authority on this matter at St. George's Hospital, feels assured that, efficiently administered, ether will soon supplant chloroform as the anæs-

thetic in general use. It should not be forgotten, however, that casualities have always occurred occasionally, and are incident to operative manipulation arising either from shock or syncope, or from idiosyncracy of constitution. "If a sufficient amount of chloroform be given to produce narcotism," Dr. Jones observes, "there is sufficient in the system to cause death in these cases;" and he illustrates the axiom by reference to a case in which but five per cent. of it was inhaled—the amount prescribed as being within the limit of safety—and yet the patient died suddenly without any warning, by lividity of countenance or other symptom. Unlike such instances, the signals of danger usually come on gradually, and may, fortunately, be arrested. When full narcotism is accomplished and consciousness abolished by chloroform, it seems very desirable, if the effect be desired to be kept up, to change the anæsthetic to ether or nitrous oxide. Mr. S. Charles Smith of this town informs me that this practice is already adopted at most of the London ophthalmic hospitals.

In the selection of one of the two great agents, I should be much governed by the precise nature of the case; as, for example, traumatic injury with hæmorrhage, or a morbid condition of the heart or other viscera. Wherever alcohol would be indicated I should give the preference to ether, its special action being stimulant. Complete stupor by the protoxide of nitrogen is difficult and ephemeral, though safe, and is accompanied by a great mitigation of local pain under the knife. It is rather a curious circumstance, as mentioned by Mr. Woodhouse Braine, that the lowest known temperature is produced on the combined mixture of two anæsthetics—the bisulphide of carbon and compressed liquid nitrous oxide; viz., 220 degrees below zero of Fahrenheit.

On a review of the question so hastily and imperfectly expressed, my impression is, that the late ventilation of the subject has greatly added to the store of our knowledge, and restored ether to its pristine position. It has given us the option of one or other of these agents, or a combination of them in any threatened cardiac failure. Profound narcotism is, no doubt, more easily induced by chloroform, were it unattended by danger. On Tuesday last I administered a drachm and a half on lint to a youth whilst under lateral lithotomy, performed by Mr. Jubb of this place. Complete somnolence continued until after he had been put to bed, and was not followed by any untoward after-symptom. Chloroform is more pleasant in such quantity to take than ether, though in that respect surpassed, perhaps, by the nitrous oxide gas. As observed by Mr. Couper, however, the time relatively consumed in the administration, and the disagreeable perfume of

the vapour of ether, are unimportant, if regarded as safer, and to be free from nausea and other sequelæ.

With the bichloride of methylene, except as spray, we have had no experience here, and it would seem to possess no immunity from danger in its use.—*British Medical Journal.*

CASE OF POISONING BY ACONITE TREATED BY DIGITALIS —RECOVERY.

By William Dobie, L.R.C.S. & P.E., Keighley.

I was requested one morning, between 12 and 1 a.m., to visit a veterinary surgeon who was supposed to have taken poison. The place where he lodged was scarcely a hundred yards from my house, and only a few minutes elapsed before I saw the patient. He was stupidly drunk in bed, and unable satisfactorily to answer questions. His landlady, however, informed me that he returned home the worse for drink about midnight; that he went direct to his surgery, took out a bottle of medicine, and went up stairs to bed; that shortly afterwards he rang the bell, and said he had taken a large dose of poison, which was certain in a short time to prove fatal. There was a two-ounce bottle, with its lable defaced, lying by the bedside. The bottle contained about half a drachm of brown-coloured liquid, a portion of which I applied to my tongue, and was satisfied, by the characteristic tingling induced, that it was aconite. Up to this time there were no symptoms of the patient having taken poison. There had been no vomiting, the breathing was natural, the pulse of fair volume and strength, and the extremities were warm. An emetic was prescribed; and, in coujunction with my late partner, Dr. Ramsay, I visited the man again in less than half an hour. By this time he had vomited freely; a considerable discharge had also taken place from the bowels; there was evidence, too, of failing circulation; the pulse was rapid and feeble, and the feet and hands were getting cold. The use of stimulants was clearly indicated; and, in order to give ammonia and brandy, we raised the patient's head. This brought on alarming prostration; the breathing became laboured; the pulse, at the wrist, irregular, intermittent, and finally imperceptible; there was a quantity of frothy mucus discharged from the mouth and nostrils; the skin became dusky; a cold, clammy sweat bedewed the face and forehead: in a word, the patient was dying. We quickly replaced his head upon the pillow, and, as he was unable to swallow, injected subcutaneously twenty minims of tincture of digitalis, and then applied galvanism to the cardiac region, and continued its use for about twenty minutes, at the end

of which period the patient began to rally, and in a few minutes more was able to swallow a mixture of ammonia, brandy, and a teaspoonful of tincture of digitalis. Marked improvement followed the administration of the mixture, and it was twice repeated within an hour, by which time the breathing had become easy, and the circulation re-established. We remained with him about half an hour longer, and, before leaving, gave him a cup of strong coffee, which, however, was vomited. I saw the patient again the following morning, when he expressed his surprise at being alive, as he had taken, he said, an ounce of Fleming's tincture of aconite.

Remarks.—I sent what was left of the aconite to Messrs. Harvey and Reynolds, chemists, Leeds, and they informed me it had been prepared with "cleaned" methylated spirit, and was of rather more than the average strength—that is to say, two minims of it killed a young sparrow in three minutes and a half, while the same quantity of a fresh specimen took half a minute longer to accomplish a similar result.

The case seems to afford decided evidence regarding the action of digitalis. While making due allowance for the combined influence of the electricity and stimulants, it is difficult to conceive if the doctrine, which is far from obsolete, be true, that digitalis is a cardiac depressant, why its administration in this case should not have rapidly proved fatal. Such a conclusion carries with it the force of a demonstration. The old view which prevailed as to the action of digitalis seems to have been the result of an erroneous interpretation of facts. Diminished frequency of the pulse followed the administration of the drug, and it was therefore rashly concluded that the heart's action was thereby weakened. The fallacy consisted in believing that pace meant strength. A slower pulse is not necessarily an evidence of weakened circulation, but generally of the opposite.

It is but fair to state that the idea of using digitalis in this case was probably due to a conversation that we had had a short time before with Dr. J. M. Fothergill, the author of the Hastings Prize Essay for 1871.—*British Medical Journal.*

POISONING FROM THE FUMES OF CARBOLIC ACID—RECOVERY.

By R. E. Unthank, M.R.C.S., Eng., Appleton Wiske.

On Saturday, October 26th, about 1 p.m., I was called to attend Mr. P. a farmer in this district. On my arrival at his residence, I found him in violent convulsions with trismus, and blood passing

from the mouth in consequence of the teeth having wounded the tongue. He was quite comatose; the face and neck were livid; the breathing stertorous; the extremities and surface of the body were cold; the pulse was scarcely perceptible. I had him put into a warm bath immediately. In forty minutes the convulsions ceased, sensibility partly returned, the face and neck had assumed their natural hue, the breathing became quieter, the extremities and body were warm, and the pulse much stronger. He was then removed to bed, wrapped in blankets; a bottle of warm water was put to the feet, cold applications to the feet, and a strong mustard stupe to the nape of the neck. I saw the patient again at 7 p.m.; he was then perfectly conscious; the convulsions had not returned, the breathing was calm the body and countenance had increased in temperature, the pulse was 88, the tongue moist and clean, but sore. He had passed about half a pint of urine, which was more acid than normal urine; but I could not detect in it the colour of carbolic acid. He complained of giddiness, but no pain, in the head; he had pain in the face and neck, with the taste of carbolic acid in the mouth and throat, and a great deal of gastric irritation. I gave him an aperient, and afterwards a mixture composed of nitrate of bismuth, dilute hydrocyanic acid (*P.L.*), acacia mixture and water, a gargle for the mouth of chlorate of potash and tincture of myrrh, and a liniment of equal parts of belladonna and soap liniment, to be applied to the neck and face. At my next visit, on the 27th, at 10 a.m., I found him much better. The mixture, gargle, and embrocation, were continued; and he was allowed a light diet of boiled chickens, sago and milk. He improved daily, and was quite convalescent on the 30th. Had the warm bath not acted so beneficially in restoring my patient, I should at once have resorted to venesection. Mr. P. told me that on the day he became ill he was engaged in his usual occupation amongst the cattle, and had been exposed for three hours to the fumes of strong carbolic acid; and that as he was going to the house to dinner he was seized with giddiness, stupor, and convulsions. In the case of poisoning by carbolic acid, quoted in the *Journal* October 26th, from Dr. Mosler, the symptoms were similar to those under which my patient laboured.—*British Medical Journal.*

CANADA

Medical and Surgical Journal.

MONTREAL, FEBRUARY, 1873.

THE EMPEROR NAPOLEON.

For several years past the Emperor Napoleon has suffered from symptoms which gave rise to the suspicion of the formation of a calculus. These symptoms were accompanied by distressing pain in the rectum. Throughout the late war his bodily sufferings were occasionally very great, and it is now known that the physical and mental fatigue that he must have passed through up to his surrender at Sedan was rendered well nigh unbearable by the presence of a vesicle calculus. Dr. le Baron Corvisart and Dr Conneau, his physicians, declared that he was the subject of stone in the bladder. This was before the Emperor arrived in England in March, 1871. The almost absolute quiet which he enjoyed after his arrival at Chislehurst, greatly relieved the intensity of his sufferings.

In July last Sir Henry Thompson and Sir William Gull were summoned to Chislehurst, but the Emperor would not submit to a thorough examination. After this the illustrious patient went to the south coast of England, where he remained for several weeks, whence he returned with the symptoms more pronounced.

On the 31st October Sir James Paget saw the Emperor with Sir William Gull, and it was then recommended that an examination should be made to decide the presence or absence of a stone. At this time His Majesty was forced to give up horse exercise ; subsequently driving in a carriage had to be relinquished, and then his usual custom of walking became distressing. For the next few weeks he was confined to his chamber, the irritability of the bladder being constant and very distressing. Sir Henry Thompson was again summoned, and on Tuesday, 24th December, passed a flexible catheter and ascertained that very little or no urine was left in the bladder after micturition. He advised a thorough examination to be made without delay. In this he received the support of all the medical men present. Accordingly, on the 2nd January, 1873, the examination was made under chloroform, and the presence of a stone the size of a walnut definitely made

out. Sir Henry believed it to be phosphatic, and crushed it, freely removing a large amount of *débris*. There were present on the occasion, Dr. le Baron Corvisart, Dr. Conneau, Sir William Gull, Sir Henry Thompson, Mr. Clover, and Mr. Foster. This was about 3:30 p.m. At 6 o'clock His Majesty had a slight rigor, followed by the usual febrile symptoms. His Majesty passed a good night; slept at intervals, and micturated freely. For the next few days the pain on micturation increased greatly, and the urine became charged with blood. The tenesmus and straining was considerable, and was not relieved by medicinal agents. It was therefore determined to repeat the crushing, and the 6th January was selected. His Majesty was placed under the influence of chloroform by Mr. Clover at noon of that day. On attempting to introduce the lithotrite a large fragment was found impacted in the prostatic or membranous urethra. This, after some manipulation was dislodged, so as to permit the passage of a lithotrite, and a second crushing practised, a larger quantity of the *débris* was removed than on the first occasion. The following day, the 7th, small quantities of broken fragments passed; urine offensive and bloody. During the day it was evident that obstruction existed far back in the urethra, but the irritation was such as to preclude the advisability of prolonged efforts at removal. The patient was watched with care and anxiety throughout Wednesday 8th: His Majesty's physicians visited him at 11 p.m., and 2, 4, and 6 o'clock a.m. of Thursday. At 9:45 a.m. he was so well that arrangements were made for a third crushing at noon of that day. A sudden and unaccountable change, however, took place at 10:25 a.m. Sir Henry Thompson was summoned to his bedside, and he found him much altered in appearance; symptoms of rapid sinking set in, and at 10:45 His Imperial Majesty breathed his last.

We copy from the *London Standard* the official report of

THE POST-MORTEM EXAMINATION.

"The most important result of the examination was, that the kidneys were found to be involved in the inflammatory effects produced by the irritation of the vesical calculus (which must have been in the bladder several years) to a degree which was not suspected, and if it had been suspected could not have been ascertained.

"The disease of the kidneys was of two kinds: there was, on the one hand, dilatation of both ureters and of the pelves of both kidneys. On the left side the dilatation was excessive, and had given rise to atrophy of the granular substance of the organ. On the other there was sub-acute inflammation of the uriniferous tubes, which was of more recent origin.

"The parts in the neighbourhood of the bladder were in a healthy state; the mucous membrane of the bladder and prostatic urethra exhibited the signs of sub-acute inflammation, but not the slightest indication of injury. In the interior of the bladder a part of a calculus was found, the form of which indicated that half had been removed. There were, besides, two or three extremely small fragments, none of them larger than a hemp seed. The half calculus weighed about three-quarters of an ounce, and measured $1\frac{1}{4}$ inch by 1 5-16 inch.

"There was no disease of the heart nor of any other organ excepting of the kidneys The brain and its membranes were in a perfectly healthy state. The blood was generally liquid, containing only a few small clots. No trace of obstruction by coagual could be found either in the venous system. in the heart, or in the pulmonary artery.

"Death took place by failure of the circulation, and was attributable to the general constitutional state of the patient.

"The disease of the kidneys, of which this state was the expression, was of such a nature and so advanced that it would in any case have shortly determined a fatal result.

(Signed) "J. BURDON SANDERSON, M.D.
"DR. CONNEAU.
"DR. LE BARON CORVISART.
"HENRY THOMPSON.
"J. T. CLOVER.
"JOHN FOSTER.

"CAMDEN PLACE, Chislehurst, Jan. 10."

Sir William Gull left Camden Place as soon as the autopsy was over, and was not present at the careful consideration and discussion of the facts which ensued by the other medical men assembled. He records a dissent on one point only, namely, the origin of the calculus, in the following terms, viz.:

"I desire to express an opinion that the phosphate of lime calculus, which formed the nucleus of the mass, was the result of prior cystitis (catarrhus vesicæ), and not the cause of it. This nucleus was of uncertain duration, and may even have been more recent than supposed in the appended report. However this may be, it was encrusted by two distinct and more recent formations of crystalline phosphate. The inner incrustation around the amorphous phosphate of lime was dense, and supported from the outer incrustation by a looser cellular but crystalline deposit of triple phosphate.

"It seems to my judgment more in accordance with clinical experience to regard a cystitis as a prior lesion, and that by extension, as is common in such cases, it affected subsequently the ureters and pelves of the kidneys. No doubt in the latter stages of the malady, the calculus became, by this formation and increase, an augmenting cause of the lesions.

"The other facts and statements I entirely endorse.

(Signed) "W. W. GULL, M.D.

"BROOK-STREET, Jan. 10."

A MEDICAL ACT FOR NOVA SCOTIA.

From the London *Lancet* we learn that a Medical Act for the Province of Nova Scotia comes into force on the first of May next. One of the provisions of this Act is, that any person, after May, 1873, practising as a physician or surgeon in the Province of Nova Scotia, for gain or reward, without being registered under this Act, shall forfeit a sum of twenty dollars for every day that he shall so practice. We certainly rejoice to hear that the medical profession in our sister province has obtained an Act of incorporation. With regard to the operation of the penal clause we fear that it will be difficult to enforce. There will be the same difficulty which has been experienced in Ontario. The clause being penal, it is held by a large number of members of the legal profession in that province that no judge would enforce it, because the Local Legislatures of the provinces do not possess the power of introducing clauses of this nature into any of their Acts. This power alone rests with the House of Commons for the Dominion. If this be the case, then will the Act of the Legislatures, both of Ontario and Nova Scotia, become inoperative. It will, therefore, become the privilege of each province to adopt what they think best, in respect to the preliminary qualification, the character of the curriculum, and the method of professional examination. Here their powers end. It remains for the Dominion Parliament to state who shall be recognised as Physicians and Surgeons throughout the Dominion, and what penalty shall attach for falsely assuming the title of Physician and Surgeon and exercising the functions of that calling.

We think it is a reflection on our common sense that there is such a lack of unanimity in our ranks. A Bill was submitted to the profession at the first meeting of the Canadian Medical Association, and five years of tedious argument *pro* and *con* had to be gone through, and then the bill was withdrawn by the proposer. There was no desire to amalgamate, no desire to endeavour to rectify

what did not quite suit an individual or a locality. Wordy argument, pointless and objectless, was freely indulged: men spoke and declaimed without actually being aware of the gist of their sayings, and at the end of five sessions of our Canadian Medical Association we separated with the same unpleasant feeling of estrangement. Like oil and water we would not mingle; our interests were at variance, and the utterances of many were looked upon with doubt and suspicion.

The fact is, as a profession we do not want a general Act. Individually, we should like to see it; but what will answer the Province of Quebec will not do for Ontario, and what Ontario asks will not suit Quebec; so that sooner than put up with half a loaf we prefer to go without our bread There appear to be conflicting interests which will interfere with the passage of a general Act. We have good reason to believe that the Province of New Brunswick will obtain an Act at an early date, somewhat similar in its provisions to that passed by the Nova Scotia Legislature, and then will we be in the very anomalous position of forming part of a confederacy, with separate and distinct legislation in matters medical; so that a votary of the liberal profession of medicine will find himself, when in any other province but his own, debarred from practising his calling unless he submits, at the discretion of the board of examiners of the province in question, to a further test of proficiency. The Province of Quebec forms a single exception to this rule, as we are governed by an Act passed in the tenth and eleventh year of Her Majesty Queen Victoria, whereby it is provided that "every person who has obtained, or who may here "after obtain, a medical degree or diploma from any recognised "university or college in Her Majesty's Dominions, shall be enti- "tled to such certificate without examination as to his qualifica- "tions."

In the article in the London *Lancet* above referred to, we find the following: "It will be interesting to see how the newly-created "medical boards and councils in our colonies recognise foreign "and American degrees."

On this subject we regret that our contemporary is so remarkably foggy. As far as our own Province of Quebec is concerned we have no power to recognise foreign and American degrees, and as we possess the power of prescribing a curriculum, no degree hailing from a university or college, even in Her Majesty's Dominions, that does not come up to the curriculum prescribed can be recognised, nor can its graduates obtain our license without a further test by examination. In Ontario British degrees or diplomas are unrecognised; all candidates for registration are obliged

to submit to examination. We are unable to state the provisions of the Nova Scotia Act, as we have not received a copy of that document, but we believe that it is in a great measure similar to our own, which would exclude all American and foreign graduates. The liberality of the Quebec Act recognises all British degrees and diplomas for what they set forth; but if a British graduate presents for license and that his certificates are defective in any particular, he would have to satisfy the Board of Examiners, by examination, as to proficiency on subjects upon which he does not appear as having passed any examination, as in this Province we all hold the double qualification, there being no distinction between physicians and surgeons. No foreign or American degrees are recognised, and a candidate hailing from an American university or college would be required to satisfy the Board: first, that he has fulfilled a curriculum similar to the one prescribed by the college. This will entitle him to an examination which, if he passes successfully, he will then receive the license to practice his profession in the Province of Quebec. This is substantially the practice in Ontario. In both Provinces it is held that two sessions of American colleges are equivalent to one in our own institutions. inasmuch as the sessions of the colleges of the United States are, with few exceptions, barely of four months duration.

AN EXPLANATION.

We exceedingly regret that our review of a pamphlet, headed "Meteorology and its Professors," which appeared in the last number of our journal, has been thrown into form and circulated amongst persons who do not receive our periodical. The review in question was an honest expression of our opinion and what we deemed a fair criticism of the subject under discussion. We must disclaim against the use which has been made of our type in the circulation of the article referred to.

THE TREATMENT OF LUNATICS IN THE PROVINCE OF QUEBEC.

It is with extreme regret that we have again to allude to the treatment of lunatics in this Province. Our attention was recently drawn to the fact that towards the end of last month, or within a few days of our publication, a number of lunatics were removed from the common jail of our city and sent to the asylum at Beauport. Upon inquiry we learnt that some of these unfortunates had been residents in the common jail for several months, and in one instance, the case of a woman, the lunatic had been in prison

since last June. We believe the custom is to retain the lunatics in our prison for a certain period, with a view to having them under the *surviellance* of the jail physician, who is expected to certify before a judge of the Superior Court that they are dangerous lunatics and fit objects for confinement in a lunatic asylum. This form has to be complied with, and no lunatic can, in Canada, be legally incarcerated in an asylum for the care and treatment of the insane, without the certificate of two medical men and an order from a judge of the Superior Court. We regard this as unnecessary, and certainly in the case of the lunatics from this part of the Province of Quebec it is a great hardship.

We have before alluded to insanity being a well recognised disease, having distinct exacerbations. In some overwrought brains the attack is acute in its nature, and if carefully and judiciously treated it will not pass on to that chronic form of the disease which is so apt to be permanent, or, at best, be attended by a lengthened attack of mental alienation. Why then place the pauper lunatic under a condition of such extreme misery that in his lucid moments he must feel himself abandoned and forgotten by his fellow man: an outcast from society: not fit even to herd with swine; cast off, shut up in a loathsome cell of a prison house—deprived of his freedom and denied the light of day, except that which struggles through the grated and barred window of his apartment.

Looking on this subject from an economic point of view, we we would ask, is there wisdom in this course of action? Insanity is a disease, granted, it is an acute disease, and that period, like in all acute diseases, most amenable to treatment is at the outset of the attack. Allow that period to pass unnoticed or maltreated, and what is the result? A confirmed and settled madness, and, as a consequence, an unfortunate fellow mortal thrown upon the country for care and support during the continuance of his natural life. This is the case of the pauper lunatic. The lunatic who has friends willing and able to succour him in his distress is placed under very different circumstances. His disease is recognised at the outset; he is at once placed under judicious treatment; isolation and removal from all sources of worry and annoyance are at once adopted, and in the majority of cases he is enabled to return to the bosom of his family and to his industrial occupation after the lapse of a few weeks or months.

This is no garbled statement nor overdrawn picture. There are many cases that could be cited even in our city, with its hurry and excitement where men striving to become rich, and labouring by night and day their over-taxed mental faculties gave way and tem-

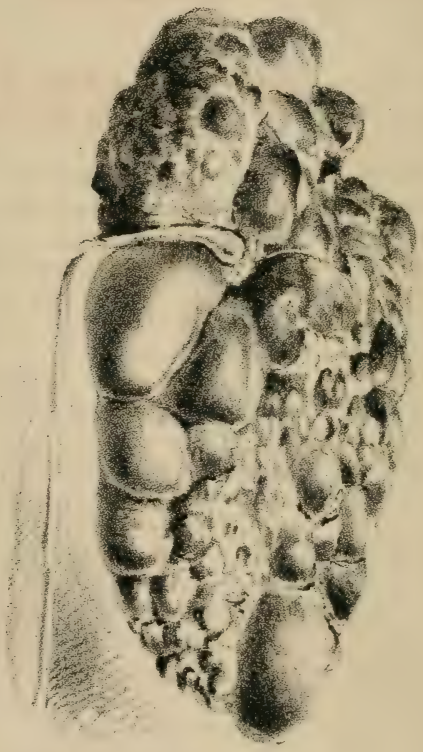
porary derangement was the result; but how awful to contemplate if all had to pass through the harrowing routine of waiting in a filthy cell, whose entire surroundings are sufficient to drive a sane man mad, until the jail physician has made his report, and has satisfied the higher official of the correctness of his diagnosis. No; if we desire to remedy this evil we must first begin by providing extra asylum accommodation; and, again, our government ought to insist on inspection of lunatics as soon as possible after committal to the common jail of the district, and if declared insane, instant removal to a proper asylum for their care and treatment.

Death has been very busy in the ranks of the profession in England. Recent exchanges announce the death of Mr. Carden, of Worcester, a surgeon of eminence who, had he lived, would in all likelihood, have received the honour of election as President of the British Medical Association. Mr. Carden is known to the profession as having suggested and practised a method of amputation by the single flap, which is recognised and very generally adopted at the present day, and holds a prominent place in surgical literature.

Mr. Holmes Coote, Senior Surgeon to St. Bartholemew's Hospital and Lecturer on Surgery, died on the 22nd December under very distressing circumstances. For some months past symptoms of brain disease made their appearance, induced by over work, and the unfortunate gentleman had to be isolated in a lunatic asylum. His malady was regarded as temporary, and his colleagues, hopeful of his recovery, attended to his hospital work, which enabled him to retain the title and emoluments of office. Mr. Coote was a skillful anatomist, and active teacher, and a surgeon of considerable resources. His writings are clear and exhaustive, many of which will be found in "Holmes' Surgery". He died at the early age of fifty-six.

A NEW ANTIPERIODIC.

M. Doran has stated in a note to the Academy of Sciences of Paris (*Comptes Rendus*) that he has never known the Laurus nobilis to fail in quotidian or tertian intermittents. Cases yielded to it that were fruitlessly treated by quina. He has no doubt that in quartan ague it would be equally efficient.—*The Doctor.*



Weight 4 lbs. 11½ oz.

General Cystic Degeneration of Kidney.

Dr. Reddy's Case.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

A Case of General Cystic Degeneration of the Kidneys. By JOHN REDDY, M.D., L.R.C.S.I., &c.; Physician to the Montreal Hospital.

(Read before the Medico-Chirurgical Society of Montreal.)

MR. PRESIDENT AND GENTLEMEN: I wish to bring before the notice of this Society the history of a very interesting case which has been lately under my care, and which presented many features of much interest, especially in a diagnostic point of view, showing the difficulties that frequently surround the observer's path, even where the greatest care may have been taken.

On the 25th October, 1872, I was sent for by an old patient of mine, Mrs. P., aged 43, five feet ten inches high, of large make, who gave me the following history of herself: Prior to October, 1871, she had been in the enjoyment of good health, weighing 285 pounds. After this period her health began to decline, and she experienced occasional uneasy sensations in her left side, but never of a painful character; her appetite was capricious and her strength below par; she slept well, however, but often felt unrefreshed and tired in the morning; her bowels, at this time, were unusually costive, but easily regulated by the use of fruit and other diet of a laxative character, her urine was occasionally very dark in colour, but never deficient in quantity; catamenial periods regular; she was able to take plenty of out-door exercise in cabs or sleighs, but walking fatigued her, especially going up or down stairs; she was much astonished to find that at the end of six months she had lost 65 pounds of her weight; she then consulted a physician of this city, about May or June, who, she told me, discovered a tumour in her left side, and who treated her for a short time and then ordered her change of air to the sea-side, whither she went. After remaining there for some time without experiencing any decided benefit, and also feeling troubled, for the first time, with a pain of a dull, aching character in the left

side, she went into Portland and consulted an eminent physician there, who did not make any physical examination, but ordered her a croton oil liniment to be applied over the painful part, which gave her decided relief; she returned from thence in August, and for about five weeks felt much better, with little or no inconvenience, observing, however, that whenever she came down stairs, turning from right to left, she suffered again from the dull aching in her left side and a kind of restraint in walking; she went out for a carriage ride frequently at this period, and also observed that whenever she used her right leg in ascending it produced the pain already described, although jolting seldom affected her in the least; she further stated that while at the sea-side, and for some time before going there, her urine became of a very dark porter colour, but had not diminished in quantity.

Present Appearance.—Face emaciated, of a peculiar dark colour, with slightly olive tinge, so striking that the existence of malignant disease at once suggested itself to my mind; she seemed much careworn and depressed in spirits; walked into the room very slowly, and with a strange semi-rotatory gait, as if she could not bend her back, hips or knee-joints; on sitting down complains of shooting pain from hips to knees. I requested her to retire to bed as I wished to examine the abdominal region. Her pulse was 80, regular but weak in volume; temperature, 90 fahr.; tongue clean; her body was very much atrophied and muscles flabby; percussion and auscultatory sounds over chest normal; heart's action regular but feeble. On examining the abdominal region immediately to the right, and for about two inches below the umbilicus, I could feel plainly a large nodular, moveable tumour, traceable upwards to where the spleen is situated, and then downwards to the left to about the centre of left lumbar region; on a line from umbilicus to apex of epigastrium I discovered a second portion of a tumour of the same kind, which seemed to meet, or itself to be like a second part of the same tumour. I did not fell the right side so enlarged. I came to the conclusion that I had discovered what I then believed to be a cancer of the spleen, co-existing with and consequent upon cancer of the liver.

As she was suffering much from nausea, with acid eructations, I prescribed the following:

℞ Bicarb. Potassæ, ʒii.
Acidi Hydrocyanici Diluti, ʒss.
Tinct. Calumbæ, ℥iss.
Aquæ Puræ ad., ʒvi. M.
A tablespoonfull every four hours.

I directed that her urine should be sent to me next day for examination.

27th.—Found her much relieved from the nausea; able to retain food, and her condition much improved every way; urine, specific gravity 1009, acid reaction of a very pale milky colour, with nitric acid, and heat turns to a beautiful light pink, and deposits about 15 per cent. of albumen. Microscopic character: Several round, granular corpuscles and fat; no casts of tubes.

30th.—Feels verp much better, and able to have a ride daily in the open air for an hour at a time.

Nov. 8th.—Visited her twice since last record, but nothing particular to note. To-day, however, she was again seized with nausea and vomiting, also with a severe attack of hæmorrhoids which are irreducible and very painful, constantly voiding quite a quantity of the pale, milky urine. No remedy seems to avail now but iced soda water and milk for the nausea, which it immediately relieves, and an ointment with opium and liquor plumbi smeared on the hæmorrhoids after stuping renders her almost free from pain. Examined the urine again to-day, the only change being specific gravity 1010.

9th.—Much better; nausea relieved; can reduce the hæmorrhoids; feels afraid to take much food on account of uneasy sensations at the epigastrium. Ordered her Pepsine wine.

12th.—Improving a little; can retain food, but with little or no relish. Ordered a tonic of citrate of iron and quina.

20th.—Had Dr. Howard in consultation with me to-day. Examined the abdominal region, beginning on the right, about the middle of inguinal region, and extending upwards in a curved line to a notch about an inch over and to the right of the umbilicus, then passing down again in a curved line to the middle portion of the left inguinal region, the lower line is about described. The tumor occupies the right and left lumbar, right and left hypochondriac and epigastric regions. To form any adequate idea of its great size and extent it was necessary to cause her to lie on her face, when it became readily felt almost throughout its entire dimensions. In this position, as well as when lying on her back, it felt as one tumour. In order to give you a better idea than, perhaps, my explanation conveys, I hand you round a diagram made at the time.

Dr. Howard regarded the case as a good example of Farre's tubercle of the liver, of which I saw no reason to entertain a doubt, as in my early examinations I considered the spleen affected also. I should have mentioned earlier that every portion of the tumour was very irregular, hard and unyielding to the

touch; exploring it caused no pain. A palliative plan of treatment was agreed upon.

27th.—Little or no change since last record till to-day, when the bilious vomiting and hæmorrhoids returned, accompanied by great prostration. Iced champagne was ordered, but could not be borne, when recourse was had to former treatment with like success. During this attack she again passed quite a quantity of the light, milky urine; no change in its character; specific gravity, 1010. Ordered Peptodyn.

28th.—Much better.

December 3d.—Much improved; has been taking out-door exercise, sleighing. She says the Peptodyn has been of great use to her.

20th.—Nothing of importance to note till to-day. She is suffering from severe inflammation of the meibomian glands of the right upper eyelid, which is very much swollen and about suppurating; she cannot sleep. Ordered Chloral Hydrate in 15-grain doses at proper intervals.

31st.—From last date almost to the present time she has suffered much, which has told greatly on her appearance; the lid is quite well; the chloral agreed well with her; I find the tumour unaltered.

January 14th, 1873.—She has been doing tolerably well since last date, and occupies herself reading, &c., out of bed during almost the entire day. She informed me that to-day, for the first time, she had passed the dark urine again; this I examined; it contained no albumen but bile acids; specific gravity 1018.

20th.—At my visit found her up and dressed for a sleigh-ride, feeling better but weak; the high-coloured urine, she told me, only lasted twenty-four hours.

29th.—Is suffering from pain, for the last twenty-four hours, on the palmar side of first joint of left forefinger—paronychia.

31st.—Is much worn out with suffering; made a free incision into abscess to her entire relief; she insisted on having chloroform.

Feb. 3d.—I find to-day a second abscess has formed over the head of the metacarpal bone, below the first. This I laid open; same plan as before, decided relief following.

8th.—Progressed favourably from last visit till during the past night; her voice became husky; her throat painful, and breathing occasionally difficult. Ordered medicated inhalations.

9th.—Much difficulty in respiring; none in swallowing; complete aphonia; has great pain in the left side of the larynx in paroxysms lasting ten minutes and at intervals of twenty minutes; finds considerable relief from the inhalations.

10th.—Is decidedly worse to-day; considerable difficulty in the respiratory act; occasional stridor; complains of choking sensation and severe pain in the larynx; can hardly swallow even liquids; seems indifferent to everything around, but is intellectually clear.

11th, 10:30 a.m.—Found her pulseless and dying, as if in the last stage of croup. She died at 4:30 p.m., retaining her mental faculties almost to the close.

12th, 10 a.m.—Dr. Roddick, House-Surgeon Montreal General Hospital, kindly assisted me at the post-mortem, and furnished me with the following notes:

AUTOPSY EIGHTEEN HOURS AFTER DEATH.

Rigor mortis strong; features pinched, pointing to considerable agony at the time of death; the abdomen was noticed to be flat over its entire anterior aspect, but bulging at either side. An incision through the abdominal walls was made, extending from the xyphoid cartilage to near the pubis, opening at once the abdominal cavity throughout that space. In drawing aside the edges of this incision to gain a view of the cavity, two remarkable looking bodies, cystic in character, were seen to occupy, on either side, a space extending from about the sixth rib to below the crest of the ilium. The liver was compressed against the diaphragm by the right tumour, and was small and contracted in appearance, although normal in structure. The spleen was pressed upward by the opposite body, but normal in every respect. The pancreas was also healthy. The tumours were removed after considerable difficulty and found to be diseased kidneys. They were afterwards carefully examined and found in the following condition:

Left Kidney.—Weight, 4 lbs. 11½ ozs.; greatest length, 10 in.; greatest breadth, 7 in.; greatest circumference, 24 in.; lesser circumference, 17 in. It consists of a mass of cysts tightly packed together in places, and here and there standing out free from the general mass. The capsule is entire and can be best demonstrated as it passes over the sulci between the cysts. It is very strong and covered with the fat usually found about the kidney. The cysts vary in size from the smallest pea to that of a goose's egg, the largest being at the periphery, and especially at the upper and posterior border. Nearly two hundred can be counted with ease, and there are probably half as many more indistinctly seen. The cyst walls are, for the most part, beautifully transparent, and their contents of a rich straw colour; but, again, there are a few cysts here and there having a wall of a dull yellow colour, resembling the appearance of the healthy organ. The body has a firm feel

when caught in the middle, as though the structure within was condensed. The ureter is normal in size, appearance and structure, excepting just before it reaches the hilum, where it suddenly expands and its walls become thinner than normal. The hilum is bounded by three or four large cysts, which make it appear very deep, though regular in outline, as is clearly seen in the lithograph on the frontispage.

Right Kidney.—Weight, 4 lbs. ½ oz.; greatest length, 11 in.; greatest breadth, 6½ in.; greatest circumference, 24 in.; lesser circumference, 15 in. This kidney has all the characters above described, in a somewhat modified degree. The capsule here, also, covers the whole. The cysts are more numerous and smaller, as a rule, the largest not exceeding a small hen's egg in size. Only one of the dull yellow cyst walls can be seen, the rest being all remarkably transparent. The ureter is identical in every respect with the other just described. The hilum is well marked, but surrounded with innumerable small cysts.

The straw-coloured fluid in the transparent cysts, when boiled, is found to contain a very large percentage of albumen, becoming almost solid. Its reaction is feebly acid. It has no peculiar odour and remains clear after exposure for hours in an open vessel. There is nothing distinguishable in this fluid under the microscope. The dark-coloured cysts contain a thick substance resembling molasses in colour and consistence. Under the microscope this is found to consist of granular matter, broken down epithelium, and, here and there in the field, masses resembling in appearance small and disorganized malpighian tufts, which, however, no doubt, are quantities of granular matter arranged in that shape. The bladder was firmly contracted but healthy.

General cystic degeneration of the kidneys is a disease usually confined to adult life, and is not of common occurrence. I find, on looking into the subject, that in fifteen cases mentioned it had occurred principally about middle life; that it was of a chronic character, and that the clinical history of these cases has been but imperfectly studied; that both kidneys become affected, but not always in an equal degree, and that it usually terminates by the patient dying suddenly. On comparing the above statement of facts with the case which I have just now read, I think the analogy is fully borne out in many particulars. I have not made a section of the kidneys, but have here another fact illustrated, that their functions were properly performed; or, perhaps I should say that large quantities of urine had been secreted and voided daily, although not normal in character.

From what I can gather with regard to the pathology, I find that Queckett attributes the formation of the cysts to dilatation of the malpighian capsules, while Drs. Conway, Evans, and Bristowe, from observation made in the incipient stages, came to the conclusion that they owe their origin, as in congenital cases, to the expansions of sections of the uriniferous tubes and occlusion and atrophy of the intermediate portions. These independent sacs are generated, and often so minute as to require the microscope, but which dilate gradually into large cysts. The granular, atrophic form of Bright's disease resembles this affection much in many of its characters. In this disease, as you are well aware, cysts form from the size of a pin's head to that of a hazel nut, but many require the microscope for their detection.

I wish to say that for much and valuable information connected with the subject I am indebted to the very able and masterly work on "Urinary and Renal Diseases" by Dr. Roberts, of Manchester.

Surgical Cases occurring in the Montreal General Hospital. Under the charge of GEORGE E. FENWICK, M.D., Surgeon to the Hospital, and Professor of Clinical Surgery, McGill University.

Case of Calculus Vesicæ—Lithotomy by the Lateral Method of Operation—Recovery.

J. Y., aged 33, a spare but muscular man, was admitted into the Montreal General Hospital on the 17th January, 1873, with well marked symptoms of stone in the bladder. Although he had suffered from bladder irritation for a long time, it was only during the past two years that it had become so severe as to render his existence miserable. Occasionally, in emptying his bladder, the urine would be arrested in full stream. This gave rise to great and even agonizing pain, extending to the point of the penis and down the front and inner sides of the thighs, as also to the testicles, and these latter were sometimes retracted, drawn up tightly into the inguinal region. This was accompanied with much straining and tenesmus, which added to his misery. He states that he had been sounded on several occasions, but no stone had been detected, although his physician told him that he must have stone in the bladder. When admitted into the hospital he could not retain his water longer than two hours at a time. The urine was normal as to colour and specific gravity; it was rather turbid, and a considerable quantity of ropy mucus and pus was deposited on standing.

On Saturday, the 18th, a short beaked sound was passed into the bladder, and the presence of a stone readily detected. It was deemed to be of large size, felt rough on the exterior, and from its clear ring was supposed to be hard and compact. From these circumstances, as also from the bladder irritation, it was thought proper to adopt the operation of cutting as preferable to that by crushing; but, before deciding that point, I desired to ascertain the probable size of the stone, as also to determine whether it was single. Accordingly, on the Monday following, the patient, having been previously prepared, was placed under the influence of chloroform, a full-sized lithotrite was introduced and the stone seized. It was found to measure an inch and a quarter, but whether in the long or short diameter could not be determined. On moving it about no second stone was discoverable.

Several days were allowed to elapse, although he did not complain of increased irritation, the consequence of the exploration with the lithotrite; yet, I deemed it more prudent to allow all irritation to subside. Accordingly, on Thursday, 23rd January, the patient was placed on the operating table, in the usual lithotomy position, and chloroform administered. A dose of castor oil had been taken the previous evening, and the morning of the operation the rectum was well washed out by an enema. The patient had retained his urine since the morning. Being fully under the influence of the anæsthetic, a grooved staff was passed into the bladder, and it was held by my colleague Dr. Howard, and the lateral operation performed. After making the superficial incision I ascertained the exact position of the membranous portion of the urethra, with the finger in the rectum. I then introduced the point of my knife into the groove in the staff, in the usual way, and incised the prostrate gland. The finger was then passed into the bladder, the staff removed, and the stone extracted. After the extraction of the stone there was rather free hæmorrhage, which, however, proceeded from the transverse perineal artery, which had been cut across close to where it is given off, in consequence of the first incision being made further out than usual. A large-sized tube was passed through a sponge, the tube inserted through the wound into the bladder, and the wound itself plugged with the sponge and retained in its position by tapes. At the evening visit he was very comfortable; pulse 88; the urine flowing freely through the tube; it was slightly tinged with blood, but there was no bleeding from the wound. He was ordered diluents to drink, in the form of barley water, but no anodyne was required as he was without pain, and said that he felt very comfortable, and inclined to sleep.

January 24th.—Much the same as at the evening visit; passed a good night; urine flowing away freely; was not tinged with blood. As he was comfortable, and there was no distress from the pressure of the tube, I determined not to disturb it; pulse 84—full and soft. At the evening visit there was no change.

January 25th.—Progressing favourably; no bleeding; urine flowing freely; pulse the same as yesterday; determined to remove the plug; this was done; the wound was glazed, and presented, at several points, commencing granulation; these bled slightly on removal of the sponge, but it was not sufficient in quantity to produce any uneasiness. He asked for an extra allowance of food, as he had been placed on low diet after the operation. In the evening I found the wound again plugged with the sponge, as the House-Surgeon stated that after the removal of the plug in the morning he had lost four or five ounces of blood. I at once removed the sponge and gave instructions for the man to be carefully watched, and should bleeding recur to send for me. No further trouble ensued; the case progressed favourably and rapidly; the urine came wholly through the natural passage on the eleventh day after the operation, and the wound looked healthy and was rapidly filling up. The patient was allowed to return to his home on the 8th February.

The stone was sawn in two halves. I noticed in sawing it, for I did it myself, that it was very dense, hard, and waxy in consistence; it presented a uniform appearance, was somewhat crystalline on the exterior, the cut surface being of a yellowish white, with a slight reddish tint. Desiring to ascertain the chemical composition of the calculus, I collected the sawdust on a filter and submitted it to my friend Dr. Girdwood, Professor of Practical Chemistry, McGill University, who kindly gave me the following results, after a careful quantitative analysis:

Cystic Oxide,	89.6
Phosphate of Lime,	8.0
Organic Matter,	3.4
	100.00

Several microscopic slides of pure cystine were prepared, and both the hexagonal plates, as well as bundles of prisms, were obtained. The stone is rough and granular on the exterior, and weighs 364 grains, or about three quarters of an ounce.

Case of Chronic Synovitis, Erosion of the Cartilages—Excision of the Knee-joint—Recovery with a Useful Limb—One inch and a half Shortening.

The following case of excision of the knee-joint is the sixth of

a series in which I have performed that operation, and the results, so, far, have been very gratifying. I may state that of these six cases, four have recovered with useful limbs. In one case amputation had to be performed, and the results of one doubtful, as the boy was taken away by his parents from the hospital while under treatment, and I have lost all trace of him. I am indebted to Mr. Carmichael, one of the clinical clerks to the hospital, for the very careful report subjoined.

S. C., single, aged 21 years, was admitted to Montreal General Hospital, August 28th, 1871, suffering from an affection of the knee-joint. Had always enjoyed good health previous to the summer of 1868; is nervous and irritable in temperament; complexion florid; blue eyes; fair hair; digestion pretty healthy; stomach sometimes irritable; bowels and menses regular; habits moral, and the history of her family is that of health.

In the summer of 1868, while walking one day, she felt the knee give her some pain, but did not pay much attention to it, going about as usual, her occupation being that of nurse. At night, on resting, the pain was not felt, but next morning found that she could not stand without support, till gently flexing the limb, and chaffing it with her hands, she was enabled to walk pretty freely. She continued to walk about notwithstanding the pain in the knee, which gradually grew worse as the winter approached, and February, 1869, was admitted to hospital, and from that time onward has been more or less of her time in hospital, until August, 1871, when she was admitted for the last time. During the time which elapsed between first admission and the date of operation she was treated locally with stupes, leeches, blisters, bandages—simple and starched, keeping the limb extended on a long posterior splint for weeks, soap plaster, iodine, &c, &c., and at one time was treated for "hysterical knee," all of which measures afforded but temporary benefit, and on the 11th October, 1872, a consultation of the staff pronounced the case a favourable one for excision.

The operation was performed by Dr. Fenwick on the 12th October, in the following manner:

Chloroform having been administered in the ward, the patient was removed to the theatre of the hospital, placed upon the operating table with the lower portion of the thighs resting on its lower end, the feet and legs projecting over the edge of the table. The affected limb was extended and supported by an assistant in that position. A semilunar incision carried around the anterior surface of the joint, at its lower part, extending from one condyle of the femur across the head of the tibia to the other, dividing the ligamentum patellæ and entering the joint. The flap was then

dissected back, the limb well flexed, the anterior and lateral ligaments carefully divided, the extremities of the bones cleaned, and the saw applied to the end of the femur, removing about an inch and a half of its lower extremity. In the same manner a thin slice was removed from the head of the tibia, extending beyond the diseased portion. The patella was removed. Considerable hæmorrhage occurred from a couple of small arteries (articular); these were secured by ligatures, the wound washed with a weak solution of carbolic acid, the extremities of the bones fitted together, the flap laid down, and the edges of the wound secured by eight or nine wire sutures. The leg was then placed upon a well padded, long, posterior splint of iron, provided with a foot-piece, and extending from the buttock to beyond the heel. The splint was secured to the limb by a bandage reaching from the ankle to within a few inches of the lower margin of the wound; the thigh was secured to the upper part of the splint by two straps carefully padded. The patient was then removed to the ward, placed upon a swing bed, and the wound dressed with a weak solution of carbolic acid. In a few hours the patient was given, hypodermically, morphiæ sulphat ¼ gr., and ordered beef-tea, broth, milk, brandy 4 ozs.

October 14th.—Temperature, 100 2-5 ○; pulse, 120; respirations, 28; has slept a little during the night; the knee is very painful and there is some swelling; one of the sutures at the inner side of the wound was removed; thirst is great and the skin hot; has taken some beef-tea and a little toast; during the twenty-four hours has received three hypodermic injections, each containing ¼ gr. Morph. Sulph., and Sol. Plumb. Diacetatis was applied to wound.

October 15th—Temperature, 99 4 5 ○; pulse, 130; respirations, 30; fever slight, though the pulse continues high; knee is very painful, much swollen, and some discharge at the edges of the wound.

October 16th.—Temperature, 98 4-5 ○; pulse, 128; respirations, 30; slight discharge from the edges of the wound.

October 17th.—Sutures removed; wound is painful; discharge healthy and small in amount; she eats little, but continues on the brandy, hypodermic of morphia, &c; procures some sleep, and the injection of morphia is of great service in diminishing the pain. From this time onward no item of importance occured, the lead lotion being kept up, the hypodermic given regularly—thrice in twenty-four hours, and the brandy, beef-tea, &c., continued. Her appetite varies, sometimes taking food moderately well, at other times suffering from slight irritation of the stomach. Since the

operation her bowels have been relieved once every five or six days, sometimes with the assistance of a mild purgative, and the urine passed regularly two or three times in the day. The bandages and padding of the splint received any little attention demanded, such as alteration in and steadying the footpiece, tightening the bandages, removing portions of moist wadding, and careful attention to cleanliness.

On November 9th the splint was taken down, repadded, the limb washed and put up again. The wound has now united in the greater part of its extent, remaining open at the dependent edges. The discharge is not great, and great cleanliness of the wound is observed.

November 9th.—For the past few days some matter has been accumulating at the inner and front aspect of the wound. An incision was made and a small quantity of pus gently pressed out. Patient's health is pretty good, and she seems to be doing well. Dr. Fenwick remarked that in these cases it was necessary to the ultimate success of the operation that all collections of pus should be at once evacuated by early opening. Such was his own experience and it was in accordance with the teaching of other surgeons.

November 18th.—Splint taken down; wound examined, and a small sinus found at the outer side of the thigh running up from the external angle of the wound. Chloroform was given and a drainage tube inserted to the full extent of the sinus. The lead lotion was discontinued and a weak solution of carbolic acid, 1 to 60, substituted.

November 19th.—Pulse quick, 120—pretty full. Complains of weakness and irritability of the stomach.

November 22nd.—Feels better; pulse still continues high; knee is very painful, and considerable swelling about the lower part of the wound. The tube is discharging little pus.

November 23d.—To-day an opening was made at the lower part of the wound and about an ounce of sanious matter removed.

November 25th.—Had a slight chill or rigor about 6:30 a.m., followed by active perspiration; complains of thirst, weakness and headache; feels anxious; pulse, 130; cheeks slightly flushed; the temperature was not taken.

November 26th.—Feels better to-day, though she still complains of some weakness; the pain in the joint is sometimes severe; the swelling is diminishing, and the discharge is ceasing; drainage tube was removed.

December 1st.—Splint taken down and on examination firm union was found to have taken place between the bones; the splint was replaced and the lotion of carbolic acid continued, as a

small portion of the wound yet remained open on outer side of the knee.

December 17th.—The splint was taken down; firm union existed between the bones, and the wound was completely healed. From this time onward simple bandages were applied to the leg, with sandbags supporting it on each side. In a few days the swing bed was removed and the patient placed in an ordinary hospital bed.

On January 2nd she walked for the first time, supported by two persons, one on each side. After this feat she remained in bed one week, and since the 9th January up to the present date, February 15th, she has been sitting up three or four hours of the day, with the leg supported by a chair, walking a little each time with the assistance of crutches. Her appetite is good; she eats plenty of nutritious food, is in good spirits, looks well and seems to have made an excellent recovery. The hypodermic injections have been discontinued for some time, and the brandy has long since been omitted, but in lieu thereof she was ordered a pint of porter daily, which she still takes. It agrees well and, I have no doubt, has conduced to her satisfactory recovery.

By the most careful examination the amount of shortening in the limb is found to be only an inch and a half.

Two Cases of Morbus Coxarius—Excision of the Hip-joint—Recovery.

The record of excision of the hip-joint is certainly very encouraging. The cases reported on this continent as occurring in the practice of Surgeons of Eminence, has established this operation as not only justifiable, but where neglected in cases of advancing disease of the bones, as indicating a positive neglect of duty on the part of the surgeon. This position is strengthened by the very unpromising case, the first of the two here reported. I need hardly say that I despaired of benefit accruing in this particular instance, but I can only add that to my own mind it suggests lesson of great practical value, as indicating how rapid is the recovery, in cases apparently the most desperate, more especially in children, as soon as all source of irritation is removed. Mr. Robert H. Bell has given me the clinical report of this case here subjoined.

J. E., aged 9, a native of Canada, was admitted to the Montreal General Hospital on 7th September, 1872, with morbus coxarius of the left hip. His father is still living, but his mother died several years ago. He had been an inmate of the Ladies' Benevolent Institution of this city for the past three years. About six months after his admission to that institution he was first noticed to limp,

and complained of his hip being sore. It is supposed that he hurt it about that time in jumping off a porch about six or seven feet high. The attending physician of the house was called in and attended him for several months, keeping his leg on a splint. He was sent to the Montreal General Hospital about June, 1870, and remained there five months, but was discharged not much better, although he could still run about. About eight or nine months afterwards a sore appeared which suppurated freely and continued to get worse, sometimes discharging as much as one and a half pints of pus in the day, frequently mixed with blood. The attending physician at that time was syringing it out daily with carbolic acid. The boy was otherwise in pretty good health; however, from the constant drain on his system he became gradually weaker and thinner, till, on his admission to hospital on the 7th September, 1872, he was a mere skeleton. He was very much emaciated. The skin on his face seemed as though glued to the bones, being wrinkled and dried, giving him the appearance of an old man.

On October 1st he came under the care of Dr. Fenwick, who had very little hopes of his recovery. He lay in bed with both legs flexed on his thighs, one across the other, and both thighs on his abdomen. There was partial anchylosis of the joint.

On October 11th a consultation of the medical staff of the hospital was called, and it was then decided that his only chance of life was in the performance of excision of the joint.

Saturday, October 12th, excision of the hip joint was performed by Dr. Fenwick in presence of the Clinical Class, and assisted by the medical staff of the hospital. Chloroform having been administered, a V shaped incision was made over the trochanter major, the apex of the flap running into a sinus situated below and between the trochanter and the tuberosity of the ischium. The attachments of the muscles inserted into the digital fossa were severed. The leg, having been carried well across to the opposite side, was strongly rotated inwards, the capsular ligament opened, the head of the bone thrown out of its socket and sawn off below the trochanter major. The head of the femur was found much diseased, as though it had been half worn away from constant friction.

The wood-cut on opposite page gives a faithful representation of the appearance of the bone.

The acetabulum was found diseased, in fact perforated. The rough edges of the diseased portion were carefully removed with the gouge. The cavity was then stuffed with oiled lint, and as the wound was unusually long it was partially closed with two sutures. It was

now found that the limb could not be extended in consequence of the rigid contraction of the tensor vaginæ femoris and adductor longus, so that they had to be divided subcutaneously, as also the hamstring muscles, to enable the leg to be straightened, as it was flexed on the thigh almost at a right angle. The leg, after careful bandaging, was now placed on a well padded, long, iron gutter splint, having a deficiency opposite the situation of the wound, and was retained in position by bandages. The child was ordered liberal diet, with two ounces of port wine daily.

October 13th.—As suppuration was considerable the dressing was removed, the wound washed, and fresh lint replaced. The following day the splint was removed altogether as the child complained of great pain in the limb from its extended position. He lay on his side and expressed himself as feeling comfortable. The wound was dressed and a poultice applied. The wine was increased to four ounces daily.

October 18th.—Feels well and cheerful; is comfortable lying on his side with both legs drawn up; eats well, is hungry and asked for an egg. This was allowed, as also half a dozen oysters. Passed a good night; slept soundly, although he was awake several times through the night. His pulse is high, ranging about 140; respirations, 56.

October 19th.—This morning he was very dull, irritable and weak; rather more fever about him than during the past few days; his skin was hot and dry; pulse about 144; the wound looked red and as if threatened by erysipelas. Ordered Syr. Ferri Iod. gtts x. three times a day; otherwise no change in the treatment.

October 21st.—Much better; is more cheerful although still feverish; the redness about the wound is disappearing, and the granulations are looking florid and healthy; his pulse is lowering, and his appetite is improving; what he takes is with a relish.

From this date he steadily improved, but slowly; the wound filled up with healthy granulations; has gained flesh, and the

appearance of old age which was so noticeable before the operation disappeared. On the 14th November, or at the end of the fifth week, he received his clothes, was taken up, dressed and seated in an easy chair; this change of position agreed well with him. Nothing further of special interest occurred in this case; the improvement was slow; the discharge from the wound gradually lessened; as he gained strength he would creep about the floor of the ward on his knees, laying some stress on the affected limb. Towards the end of December he received a pair of crutches and commenced walking with them. At first his gait was unsteady, but very soon he acquired confidence and strength, and walked about freely without danger of falling. At the time of closing this report, 15th February, the child is well; has gained flesh wonderfully; there is hardly any discharge, the wound having all but closed; there is, however, a small opening at the lower part which still discharges; he can bear the weight of his body on the limb. There is about three inches of shortening.

Case II.—This case differs from the foregoing in the circumstance that the disease was not nearly so far advanced. The little boy was in a far better condition to stand an operation of such magnitude than was the one whose case has just been reported; nevertheless, he made a slower recovery, and when he left the hospital he did not present the robust and healthy appearance of the other child. I have to acknowledge the kindness of Dr. Roddick, the House-Surgeon, in furnishing me with the following notes of the case:

J. M., a pale-faced, scrofulous-looking boy of eight years, was admitted into the Montreal General Hospital, under care of the late Dr. Fraser, in the month of May, 1872. On careful examination there were found to be present the ordinary signs and symptoms of hip-joint disease in the earlier stage, viz.: apparent lengthening of the left leg, flattening of that buttock, and absence of the usual furrow of the nates on that side, besides pain referable to the inner side of the knee, tenderness on pressure, or tapping over the trochanter, or on the sole of the foot, &c. His parents are healthy people, and no other members of the family have ever been the subjects of scrofulous disease. The present condition of the boy can be attributed to no definite cause. There is no positive history of a fall or blow on the hip, although such accident might, as so often happens in such cases, have been overlooked by both the patient himself and his parents.

Immediately on admission the condition of things being recognized, the patient was ordered to bed and the affected limb put up on a long splint, with extension apparatus with weight, the

latter being about 5 lbs. In this position he remained comparatively comfortable, excepting at times when the apparatus became disarranged, until the month of October, when Dr. Fenwick took charge of the ward in which he was under treatment. He had emaciated considerably in the meantime, and was, if anything, more pasty-looking than before, while the signs and symptoms referable to the hip-joint were unimproved. Dr. Fenwick, thinking the case a suitable one for excision of the head of the femur called a consultation of the staff of the hospital for the 11th October, who coincided with him in his opinion, and the operation was arranged for the day following.

Chloroform having been administered, a V-shaped incision was made over the position of the trochanter upwards into the buttock. The flap thus formed, being raised from the point towards the base, exposed the joint, which was opened and the head of the femur forcibly thrown out. With a Butcher's saw the bone was divided immediately below the trochanter; but, finding a suspicious portion still remaining, another slice was removed. The cavity of the acetabulum was then carefully explored for disease, and found to contain a quantity of gelatinous matter. The wound was washed out with a weak solution of carbolic acid and the sides of the incision brought together by sutures, leaving the point free. The cavity was stuffed with strips of oiled lint, and the whole covered with the same and oil silk. The limb was then put up on a splint of perforated zinc, having a broad piece of metal to envelope the entire hip and side up to near the axilla, with an opening directly opposite the wound, and through which the dressings could be made without disturbing the limb.

As to the pathological condition of the part, there was no pus discovered in the joint or any of the surrounding tissues. There was a very interesting condition of the cartilage covering the head of the femur, namely, it was raised from the bone for nearly the whole extent of the articular surface and the cavity beneath filled with a serous fluid. The acetabulum was found denuded of cartilage chiefly at its upper portion.

At 6 p.m. of the same day, and about four hours after the operation, the boy's pulse was 160, but of medium volume. He had vomited several times from the effects of the chloroform, and still feels a constant nausea; the tongue is dry, and his nose has bled, probably from the exertion of vomiting. This condition of high pulse, dry tongue, with nausea and vomiting, continued almost uninterruptedly for the three days following the operation, notwithstanding the great care taken with his food. He was fed on limewater and milk, with beef-tea in small quantities.

October 15th.—To-day he was chloroformed and the wound dressed with carbolic oil on lint. This was done with facility through the opening in the splint, without in any way disturbing the latter. His pulse has now come down to 140 per minute and the vomiting has ceased. The boy expresses himself as quite comfortable in every respect, and is getting an appetite for his food.

October 20th.—Nothing remarkable has transpired in connection with the case during the past five days. The wound has been dressed twice since the last note was taken, and without chloroform. To-day, Dr. Fenwick removed two of the stitches on either side, the edges having united for about two inches from the base of the incision Pulse 130; sleeps well; tongue cleaning; complains of no pain or uneasiness in any part. The wound has been regularly stuffed from the bottom with the strips of lint soaked in the carbolic oil.

October 28th.—The wound is granulating quickly from the bottom. The dressings now are removed daily, and the cavity syringed out with a very weak solution of carbolic acid. The external wounds are healed, excepting at the point of the V, beneath which the lint is introduced to the deeper parts. Dr. Fenwick to-day ordered two ounces of port wine to be taken during the twenty-four hours, and a rare steak, which the boy had pleaded hard for for some time. The pulse now remains steady at 120, and the tongue comparatively clean. The bowels have been opened about every second day since the operation, but for the last twenty-four hours there has been a tendency to diarrhœa. For the latter Mixt. Cretæ Co. is ordered.

November 6th.—The splint was removed to-day for the second time since the operation, and the padding renewed. The wound is so nearly filled up that only the smallest portion of lint can be introduced. The point of the V was found, some time ago, to be raised above the surrounding skin, but strapping down for a few days with adhesive plaster has brought it down to the general level. Red-wash is now substituted for the oil as an external application. The discharge from the first has been profuse, but it is now becoming less and less every day. The diarrhœa mentioned as being present a week ago has almost disappeared. The constant injection of carbolic acid, although in very weak solution, it is thought, might account for the diarrhœa coming on, as it did, gradually, and with that idea weak red-wash has been substituted as an injecting fluid. Bromo-chloralum has been also used for experiment, on one or two occasions, and found to correct the fetor very effectually, and also to give the sore a healthy appearance.

November 12th.—The boy has been dressed and sitting up for the past two days, and this morning made several vain attempts to walk on crutches, but is very awkward and not apt at learning. The discharge from the wound is very trifling. His general condition is also very much improved, and he has a more than ordinary appetite, while his pulse is good and steady, and his bowels are quite regular.

20th January, 1873.—The boy has been detained in hospital up to this time at the earnest solicitation of his mother who, having a large family to look after, begged that he might be kept until she could make arrangements to accommodate him. He was discharged to day, the wound being entirely healed, and he could bear the weight of his body on the affected limb without pain or uneasiness.

Cases of Wound of the Knee-joint. By T. Simpson, M.D.

Wounds extending into joints, especially the knee, whether the result of accident or purposely made in our endeavours to cure disease or remedy deformities, are of such importance from their frequency, immediate effects on the system generally, and remote consequences, that anything, however trifling, that adds to our experience in these lesions is of a certain value.

The condensed account of the three following cases is especially interesting, from the fact that the accidents occurred to young, healthy men, engaged in the same pursuits, living on the same diet, and subjected, as nearly as possible, to the same common influences, all were unmarried, and each case was treated differently.

In the first, J. O., aged 25, whilst engaged in wood-chopping (Feb., 1871), caught his axe on a twig, which caused it to swerve and strike him on the outside of the right knee, the corner of the axe entering the joint over the external condyle of the femur, close to the tibia, and inflicting a wound of about two inches in length, parallel with the bone. I saw him forty eight hours after the accident. The wound was covered with several folds of plaster clumsily applied, from among which synovia was plentifully oozing. I was shewn a six ounce phial filled with a colourless, glutinous fluid which had escaped from the wound. There was a good deal of swelling and pain, and the wound was gaping and angry looking; constitutional disturbance slight, consisting of general *malaise* and acceleration of the pulse. The wound was gently closed by means of strips of plaster and a bandage, and a splint applied to the back of the joint; tepid water dressing. On my visit, four days after the accident, I found the joint enormously

swollen and distended, and extremely painful; the pain and swelling extended from the toes to the hip; fever running very high; pulse 120; great restlessness and no sleep. All the dressings were immediately removed. A pinkish, fungoid substance filled the wound and protruded about half an inch. A large pillow was placed under the joint, which gave it a slight bend. I directed a hot fomentation containing Plumb. Acet et Tinct. Opii to be diligently and constantly applied. The pain and restlessness were relieved by the frequent administration of opium. Diet, iced milk exclusively. It is needless to follow the case minutely. At the end of about a week the fever gradually abated, the swelling of the joint and immediate neighbourhood and the pain, were still great, but had almost disappeared in the other parts of the limb. The pinkish excrescence, which seemed to be bulging of the subcutaneous tissue rather than a mass of granulations, filled the wound so completely as to prevent any discharge from the joint, and the patient still required full doses of opium at bedtime to procure sleep. Linseed meal poultices were ordered to be applied during the night, and hot water and oil silk by day. This treatment generally was continued for a month from the time of the accident. The pain and swelling had now very much abated, though pressure or any degree of motion could not be borne. The little tumor still protruded, seeming to guard the contents of the joint, and the patient, who had run down to a mere shadow, was beginning to look brighter and respond to the strong animal broth, eggs, milk and wine, which had been gradually added to his diet as the inflammatory symptoms subsided. From this date the treatment consisted in the administration of Iodid. Potas. and Bark, the local application of Cupri Sulph. and pressure to the small tumor, and the daily painting of the joint with Tinct. Iodine. At the end of another month the patient was walking about and the joint perfectly recovered, with the exception of a little weakness and impatience of exercise.

The second case was that of a young man, G. S., aged 18, who was wounded (Sept., 1871,) in the same manner, and in exactly the same situation. A similar plan of treatment was recommended, but his friends, who could not be convinced of the gravity of the accident, became impatient and discontinued, after two or three days, the remedies ordered by me, substituting poultices of certain herbs collected and applied by an old woman who promised to heal the wound in a week, and into whose hands I reluctantly resigned the case. The patient, whose youth, good constitution and favorable surroundings enabled him to escape the very jaws of death, after being confined to bed for a period of four months,

was able to hobble about on crutches, with an anchylosed joint, shattered in health and lame for life.

Third case.—S. M., aged 34, was busily engaged (April, 1872,) in cutting up a stick of cedar with a large draw-knife, for the purpose of making a fire; one end of the stick rested against a bench, the other was pressed firmly against his breast. After a few strokes of the knife the wood suddenly broke and the man fell forward on the edge of the knife, which opened the knee transversely, severing the ligamentum patellæ immediately below its attachment to that bone, and exposing the smooth glistening cartilages of the joint. I saw him about four hours after the accident; he was pale, with a small, rapid pulse and bathed in cold perspiration; the patella was much displaced upwards; hæmorrhage trifling; pain not severe.

Treatment.—The leg was first firmly bandaged from the toes up; then a straight splint was applied behind the joint; the edges of the wound were well bathed with a strong solution of carbolic acid in water (the joint was not injected) and brought together by means of four carbolized silk ligatures. Two circular bandages were applied: one immediately above the patella, the other below the joint—the latter bandage being fastened to the splint; these were laced together on each side. Several layers of lint saturated with carbolic oil covered the wound, and over all gutta percha tissue and a firm roller. A full dose of opium was then administered. Four days afterwards the dressings and ligatures were removed, the wound was found in a fair state of union, though not perfectly healed, and the dressing scarcely stained by discharge. On the eighth day the wound was healed, except at the outer end, which presented a healthy, granulating surface, and closed in a few days without special treatment. Throughout there was neither swelling nor inflammation of the joint, nor, after the first dressing, was there any appreciable flow of synovia. In order to afford time for the union and consolidation of the ligament, the splint and bandages were retained for four weeks. At the termination of a little over two months from the receipt of the injury the patient walked a distance of six miles to see me and returned the same day. The joint was perfectly recovered, the only remains of the injury being a slight lengthening of the ligamentum patellæ.

In treating wounds of joints, the first and preeminent requisite is rest; all handling should be avoided; the injury is nearly always easily recognized, and probing and examination with the finger add materially to the danger. Taking my own experience as a guide I should hesitatate to inject, in simple incised or punctured wounds of the knee-joint, unless I had good reason to sus-

pect the escape of blood into its cavity, or unless, indeed, the joint were laid open to a large extent. The skin only should be included in any sutures that may be required. The case of J. O. is, I think, an excellent example of the result of "Conservative Surgery." Rest and position; soothing remedies, general and local; good, nutritious, easily digested and unstimulating food, and great faith in the efforts of nature to right herself. Not very many years ago this man would have been considered fortunate to escape death at the expense of his limb.

The testimony in favour of the antiseptic plan of treatment, as pursued in the last case, is so conclusive that any further remarks on my part are unnecessary.

MONTREAL, February, 1873.

Removal of Tongue and Lower Jaw. By WILLIAM H. HINGSTON, M.D., L.R.C.S.E., &c.; Surgeon to St. Patrick's Department, Hotel Dieu.

(Read before the Medico-Chirurgical Society of Montreal.)

There are occasions when surgeons, in the exercise of their oft-times anxious functions, hesitate between allowing a patient to drag out a few months of pain, or attempting, even at the risk of cutting short existence by a hazardous and most formidable operation, to arrest the progress of a fearful malady, relieve suffering, and prolong life. Such an alternative presented itself to me early in October last, and although at the time I shrunk from employing the knife, the result has proved, in a conclusive manner, the advisability of the procedure adopted.

An old man, William Murphy, aged 71, presented himself at the hospital in September, 1872; his general appearance was that of health; his countenance open; his complexion florid; his eye clear; his skin soft and ruddy. On a casual glance he had all the appearance of a hale, hearty, fresh old age; yet, on close inspection, an ugly-looking cancerous mass was visible through the ever half-open mouth, which involved the whole sublingual region, extended along the lower jaw, from a little below the median line on the right side to the second molar tooth on the left, and eating away, in its progress upwards, the frænum and a considerable portion of the under surface of the tongue. This large, open, cancerous surface emitted an odour of a most offensive nature; the movements of the tongue were much interfered with; and speech, as a consequence, was indistinct; deglutition was painful and difficult; and pain of a severe and lancinating character

troubled him by day, and disturbed his rest at night. He told me he had noticed a small pimple under his tongue in June last, which had been treated for some time by a neighbouring practitioner, when a physician from a distance, passing that way, recognized its true character, and suggested the patients going to New York or Montreal, to have its removal undertaken. After some time he directed his steps hither, and placed himself under my care. On a careful examination of the extent to which the structures were involved, I told him the disease had so spread as to render necessary the removal of the greater part of the lower jaw, and the whole of the tongue. He said he was prepared to submit to removal of the jaw, but he could not suffer the loss of his tongue, and urged me to remove the jaw, and to take from the tongue whatever seemed to be diseased. But believing, as I do, that partial removal of the tongue for malignant disease is objectionable, I was forced to decline a compromise whereby the original constitution and frame, "as from the Maker's hand," as Sir William Fergusson expresses it, "might be kept as nearly as possible in its normal condition." The patient now left the hospital. I cannot say I regretted his departure. Three days afterwards he returned, and urged me to proceed at once to the operation as I had proposed. Having explained to my patient the full extent and nature of the operative procedure; its immediate risk; its subsequent danger; its, perhaps, only temporary relief; the inconvenience to him of being thus mutilated; the loss of speech and of the power of mastication, I met with the same reply: "If I recover I'll be better without this thing, and if I die, thank God I am prepared for that too."

Never, during my professional experience, did I see a patient submit more cheerfully or courageously to an operation, the result of which, neither of us could predict: and if, among the conditions favourable for operations, a tranquil, cheerful and hopeful disposition finds a foremost place, then would the patient in question, I was satisfied, withstand a mutilating, which, to most others of his years, would prove fatal.

Finding him in this satisfactory frame of mind I supported him by kind and sympathetic encouragement. My own was strengthened by my colleagues, Drs. Beaubien and Munro, as well as Drs. Rottot, Dagenais, Grenier and others, who subsequently afforded me valuable assistance at the operation. I also had the advantage of the valuable opinions of Mr. Gascoyne, of St. Mary's Hospital, London, and of Dr. Fenwick, both of whom happened to visit the hospital at the time, and both of whom considered the case to be one where an operation was justifiable.

On the 27th I performed the operation thus: Patient being placed under chloroform, with his neck well raised and head thrown back, I made a vertical incision, in the median line, through the lower lip, across the chin to the hyoid bone; another at right angles to the former, along the lower margin of the body of the inferior maxilla to the ramus; and a third, similar in direction, but of less extent, on the right side. The cheeks were separated from the jaw along the whole extent on both sides, and with them the levator menti, depressor labii inferioris, depressor anguli oris, and platysma mioides, as far as the anterior margin of the masseter muscle, on the left side, and the mental foramen on the right. The knife was then passed within the jaw and made to sweep along close to the bone. The genio glossi and hyodei, genio hyo-glossi, mylo hyoidei and digastrici were divided, after a piece of twine, previously passed through the tongue, had been entrusted to an assistant. The bone was then sawed through on the left side at the ramus, and at the right at the mental foramen.

The tongue now engaged attention. Drawn well forward, with the cord still through its tip, I divided its substance, and investing mucous membrane at its base, and passing the chain of the ecraseur through the aperture, divided the hyo-glossus and genio hyo-glossus of the left side. Notwithstanding the employment of the ecraseur blood spouted from the cut lingual, but was readily arrested by a ligature.* The chain was then used in the same way on the right side. The advantage of dividing one side at a time was evident. Blood spouted from the linguals as if they had been divided with the knife, but the hæmorrhage was arrested in one before the other was divided. The stylo glossi, with any *debris* of mucous membrane, were divided with the knife, and the tongue was removed. There was very little loss of blood at the time, and not much oozing afterwards. The soft parts were brought into close approximation by interrupted sutures at short distances, and sufficient dry lint was inserted to keep the lower lip, chin and cheek from falling in. The patient was then placed in a prone position in bed. A couple of hours afterwards I proceeded to feed him. On opening his mouth and looking across the floor of lint, the whole epiglottis, from its broad, rounded, upper extremity, to its narrow thryoidean attachment, could be seen with ease. It stood almost erect, and like a watchful sentinel, bending slightly, as is usual in ordinary respiration, over the aperture whose function it is to guard and protect. The elastic feeding tube attached

* The third or fourth time only I have used the ligature within the last six years, acupressure having always sufficed.

to the stomach pump, pressing against the epiglottis, gave no trouble, produced no spasm, no effort at coughing, no resentment of any kind, but it permitted itself to be handled as if dispossessed of sensibility altogether.

The patient made a surprisingly rapid recovery. Union took place throughout the whole extent of the horizontal wounds, and throughout all but the most dependent part of the vertical incision, by first intention. The two ligatures came away on the ninth day, and on the following day he left the hospital, cheerful and happy, for his home near Rouse's Point. More than four months have now elapsed, and so far, there is no appearance of a return of the fell disease, for the removal of which the patient had submitted to the knife and saw.

He came to Montreal yesterday at my request. He presents a healthy appearance, swallows without difficulty, and evidently to good purpose, as his well conditioned state attests. He is now before you, that you may see the inconsiderable deformity which now remains, and hear to what extent speech is restored, notwithstanding the entire ablation of the chief organ which gave it articulate utterance.

Montreal, February, 1873.

[With reference to a review, in the January number of this journal, of a pamphlet entitled, "Meteorology and its Professors," the following statements, in contradiction of the allegations made, have been officially communicated to us from the University, and we beg to say that this journal has not been purposely made the medium of accusations which, from the statements subjoined, appear to be unfounded.—Ed.]

"*Meteorology and its Professors.*" Statement of Facts with reference to the Charges against the Professor of Meteorology in McGill University. By The Authorities of the University.

I. *Instruction in Meteorology.*—Dr. Smallwood, the Professor of Meteorology, who receives no salary from the University, gives instruction gratuitously, in the use of Meteorological instruments, to such senior students as desire this. Of course the class is voluntary, and only a limited number avail themselves of it. In the present session six students have been receiving such instruction.

II. *Observations of Temperature, &c.*—Dr. Smallwood's observations are made with instruments tested by standard thermometers, and both in the observatory and in a separate thermometer-house. They are made with all the precautions dictated by the Professor's

long experience in this climate, and if they differ from those of amateurs, the probability is that the latter are wrong. The difference referred to as occurring when the sun shines, is probably to be accounted for by the less favourable position of the instruments of the objector.

III. *Position of the Observatory.*—The building was placed, after much consideration, on the best site afforded by the College grounds, and is in as good a position as it is possible to secure on the flank of the mountain. No doubt an anemometer on the top of the mountain, or on the other side of the mountain, might give other local variations of winds, but the University cannot afford a series of stations of this kind. In any case, the observation of a person who has been in a gust of wind in the rear of the mountain, and who, after driving round, finds it calm in Sherbrooke street, is of no value whatever as a test for the position of the observatory.

IV. *Instruments for Observing the Force, Direction, &c., of the Wind.*—The imputation that these are defective is especially unjust, as Dr. Smallwood has the credit of devising and constructing one of the most efficient instruments for this purpose—an instrument which Professor Henry of Washington described and figured in the Reports of the Smithsonian Institution, and even had a copy of it made and sent on for use in his observatory.

V. *Time-ball at the Harbour.*—This was attended to by Dr. Smallwood punctually, until last summer, when it was intimated to him by the Harbour Commissioners that they had engaged another person for the purpose. In the past summer, therefore, if the time-ball has been incorrect, Dr. Smallwood is not responsible, as he was quite willing to have continued his services in the matter. Dr. Smallwood still gives the time to Ottawa. The gossip of ship-masters as to the time-ball, even if it relates to the period during which it was in Dr. Smallwood's charge, is of no value, as the chronometers of ships are often incorrect, a fact well known to Dr. Smallwood, who has been in the habit of correcting them gratuitously for such ship-masters as applied to him.

The above statements relate to the charges specially selected for reiteration in the review of the pamphlet attacking the Meteorological Professorship of the University, and they are sufficient to show the groundlessness of the whole. It is, however, due to Dr. Smallwood to state that his observations relate to other Meteorological, Magnetic, and Astronomical Phenomena than those referred to in the pamphlet; that he has for about forty years, with little public encouragement, kept up a continuous series of Meteorological observations of inestimable sci-

entific value; and that he has at all times displayed the utmost readiness to give the benefit of his labours to the public; through the press, to sanitary reformers, to scientific travellers and visitors, and to scientific associations abroad. In this way he has earned a lasting title to the gratitude of this country, which both the English universities of this Province have acknowledged by conferring on him their highest degrees; while the McGill University, in appointing him Professor of Meteorology and placing him in charge of its observatory, was not only acknowledging great public services, but securing the highest experience and ability which the country affords in this department for the benefit of its students.

It is only to be regretted that the limited means of the University permit no more to be done; and it is to be hoped that the public, or some of the more wealthy friends of science and education, will take advantage of the undeserved attack made upon our veteran Meteorologist, by contributing the means to place at the disposal of the University, for his benefit, more ample apparatus, and an endowment to secure the services of an assistant to aid him in his declining years, and to continue and extend the work he has so well begun. The Department of Applied Science in the University is now training young men well fitted for entering on this work, could the means be obtained to secure their services; and with such aid, and a large telescope, the utility of the observatory might, no doubt, be greatly increased.

Correspondence.

THE "TOTAL ABSTINENCE" QUESTION.

To the Editor of the Canada Medical and Surgical Journal:

Sir,—In the Montreal *Gazette* of February 14th, 1873, I find a declaration, signed by a large majority of the medical practitioners of Montreal, in which the following words occur: "That total abstinence from intoxicating liquors, whether fermented or distilled, is consistent with, and conducive to, the highest degree of physical and mental health and vigour."

This is certainly a very arbitrary statement, unsupported, as it is, by any attempt at proof. It is due, I think, to the surprised numbers who have read this declaration, made without any apparent object by so many physicians, several of them of undoubted ability and large experience, that they should be informed of the

data on which this remarkable assumption is founded. If the statement be correct that *total* abstinence from all intoxicating liquors is conducive to the highest degree of physical and mental health and vigour, it follows that the Mohammedan nations are superior in every respect to those which profess Christianity. They are not generally considered so. I am really puzzled to know what this "new departure," *en masse*, of the Montreal medical men, may signify. One thing is certain, that no man in the possession of his senses, whether he be lay or professional, who believed in such a declaration, would ever, under any circumstances, taste a drop of liquor, and I cannot help expressing my opinion that this would be a change, in theory or practice, for many of the signers. For my part, I disagree with the declaration, whatever may be its object, and in my position as Medical Superintendent of an Insane Asylum, I have uniformly maintained the benefit of beer, wine and spirits, in certain kinds and phases of mental malady. I am therefore bound, in self-defence, to protest publicly against what I regard as an ill-considered concession to mere sentiment, unworthy of men of science. Science, like art, is long and slow; its conclusions are not stereotyped for popular use, but are the result of careful and patient study and observation; nor do the unlearned public constitute a proper tribunal before which these conclusions should be tested. At the same time, I beg to say that I yield to no one in my abhorrence of drunkenness, while I differ very widely from some of my medical brethren as to the means to be employed for its diminution amongst us.

I have spoken of my own system, in which I make medical and dietetic use of liquors in the treatment of the insane, and beg leave to give you a few extracts from my last report to the Board of Inspectors, hoping it may be of some interest to your readers.

Very truly yours,

St. John's, Feb. 1st, 1873. HENRY HOWARD.

Extract from Annual Report to the Board of Inspectors of Prisons and Asylums, for the year 1872. By Henry Howard, M.D., M.R.C.S., England; Medical Superintendent Provincial Lunatic Asylum, St. John's, P. Q.

"After twelve years' experience in the treatment of lunatics, with what success is known to your Board and to those few in the Province who are interested in the subject, but most of all to many persons whose voices are unheard in public, but whose gratitude I highly value, those whose relatives have been cured in this poor establishment, I am of the fixed opinion that beer, wine

and spirits are not only necessary but invaluable in the treatment of the helpless, woe-begone lunatics. I do not speak now of puerperal mania, mania a potu, or madness resulting from lesions of the head, as these come within the range of the ordinary, well educated practitioner, but of those mysterious cases which exhibit themselves without any known cause, immediate or remote, where the body is in perfect health but the intellect completely gone, 'the Ego,' the real, responsible man lost, where all that is God-like in the human being disappears, and nothing remains but the shell or case, reduced to the lowest order of animal creation. In such cases as these, if the Medical Superintendent be deprived of beer, wine and spirits the result will be that curable lunatics will become miserable incurables. The reason is (as I have written more than once in previous reports,) (1st) that in all such cases, how violent soever the lunatic may be, there is a want of vitality in the nervous system, and (2nd) that experience has taught me that, to rouse into action this devitalized, nervous system, beer, wine and spirits are the best and safest stimulo-tonics that I can use.

"From the wish expressed by the Hon. the Provincial Treasurer to your Board, I have reduced my beer, wine and spirit account as low as I possibly can with justice to my patients." * * * * * After speaking of the expenses of the Asylum I make the following statement: "With all these disadvantages, Sir, should it not go to the credit side of my account that out of 308 lunatics I discharged cured, 130; for it must be borne in mind that, while a Medical Superintendent should not waste the money entrusted to him, his chief consideration should be the cure of those committed to his charge. Of the cures of the year 1872 it will be noted that the longest residence of any one of the seven patients in the Asylum was one year, while the others had been under treatment for terms varying from two to eight months, there being one of six, one of four, and two of three months treatment. On the other hand, as to the deaths, it will be found that they were all old patients who died, their term of residence extending from six to eleven years.

"Toronto has an Asylum worthy of any European city, provided with ample means for the classification and treatment of lunatics; is under the charge of a skilful, learned and careful Medical Superintendent, with an excellent staff of officers. The same may be said of the other asylums of Ontario; yet, the percentage of *discharges* from all the asylums of that Province, since 1841, is only 47 per cent., and as a large portion of the discharged were not considered cures, the percentage of absolute cures would, probably, not exceed 30. The percentage of the Halifax Provincial

Hospital for the Insane, since its commencement, is 39.6; that of Beauport not more than 16; that of the Missouri State Asylum about 15; that of Northampton Asylum, Mass., 29. The percentage of cures at the St. John's Provincial Asylum, since its foundation, is 43. This speaks for itself.

"It should be borne in mind, also, that in the Toronto and many other well regulated and well provided establishments for the insane, neither epileptics nor idiots are admitted; and I would respectfully direct attention to the fact that in Toronto and elsewhere the Superintendent has the right of veto, whereas I have to receive whatever patients the Government may send me, whether incurable or moribund. I would humbly suggest that the same privilege, as to admissions, as that possessed by the Superintendent of the Toronto Asylum be extended to me.

"Now, Sir, with your permission, I will say a few words on that strange disease which is known by so many names. It is to be regretted that science has, in a very deplorable degree, failed to discover the causes of insanity. All that has yet been written on the subject might be condensed and published in a small volume, bearing the well-known title of 'Guesses at the Truth.'

"The history of cases, and even *post mortem* examinations, throw very little light upon this mysterious subject. It is true that certain persons are predisposed to insanity, but whence this predisposition arises we know not; so that the various specific names by which the malady is known are as powerless to indicate the cause as a meteor is to take the place of the all-illuminating sun. Hereditary taints, intermarriage with relations, love, joy, religion, intemperance, fear, grief, &c., &c., are among the frequently alleged causes of insanity, but they are generally evolved from the minor consciousness of friends, naturally desirous of discovering some exciting cause; but in most cases the exciting cause (so called) is only an accident of the disease. In very rare cases have I found consanguinity or hereditary taint in my patients; so rare as to be almost valueless in dealing with the subject.

"Nor is it the case, as might naturally be expected, that insanity commits its most fearful ravages among the depraved portions of society. The great majority of persons who have come under my observation have been persons of good, moral character.

"Experience, however, and observations have shown that the best treatment for the restoration of reason, or, more properly, of intelligence, is found in the exercise of kindness and forbearance, and the use of all means likely to withdraw the patient from his own morbid thoughts. Hence the need of recreation, amusement and employment, for which a good government ought to supply all possible requirements to the Medical Superintendent.

"It is a fact worthy recording that not only in Europe and the Continent of America, but, also, in our own Dominion and our own Province, is lunacy increasing, and arrangements should be made accordingly, whatever be the cause of this increase.

"Thus much I have considered it my duty, as Superintendent of the Quebec Provincial Asylum, to lay before your Board, Sir, and I hope that my suggestions will not be altogether without good results, and that the Government will do what is best for the Province."

LONDON CORRESPONDENCE.

Many thanks for the *Canadian Illustrated*, which has duly arrived to hand. I have had two JOURNALS which came together some time since, but I have had no others. I must correct two things in my last letter. Instead of "nitrate" it should be *nitrite* of amyl, and by the galvanic cautery I mean the galvanic ecraseur, not the galvanic cautery as first applied by Mr. Marshall. I should have been more explicit. I heard Mr. Erichsen say that the galvanic ecraseur was the most beautiful adaptation of science to surgery of late years. He has removed several tongues with it, and the penis also, and always with the most satisfactory results, as an operation.

I went out of town at Christmas and spent a very pleasant holiday. Before leaving town about a dozen Canadian graduates had a dinner at the London Tavern, Fleet street. It used to be a famous place, but its glories are now somewhat eclipsed. However, we had a jovial time of it, and did not forget to toast our old professors.

The Royal College of Surgeons has been holding examinations for the last ten days. A gentleman who was up for the final examination of the M.R.C.S. told me that one of the examiners said that the lot who went in for their primary examination were the worst he ever remembered. Out of 105 who presented, 46 were sent back to their studies, and very few got first-class marks.

Napoleon's death has caused much sympathy here. Upwards of 50,000 people went to Chislehurst on the day of the funeral, and Prince Louis Napoleon, as he is now called, was cheered and greeted with cries of "*Vive l'Empereur!*" as he drove away after the ceremony. In an Italian paper, which I saw quoted in the *Standard* yesterday, an account was given of the Emperor's last moments, but by a curious mistake his confessor, whose name is Mr. Goddard, was rendered M. Goddam. Sir Henry Thompson has returned to his duties at the University College Hospital. He was in attendance on the Emperor, as you know. Sir

William Jenner has been at the Hospital for some time. In the autumn he was at Balmoral in attendance on Her Majesty the Queen. He is a splendid clinical teacher, very clear in his remarks, and painstaking.

I have not seen much surgery lately. A case of Paracentesis Thoracis came off at University College Hospital the other day. It was done with the aspirator, and thus done is a very neat operation. The man did not cough once during the operation, nor afterwards, while I was in the ward. About a pint and a half of pus was drawn off. I saw Mr. Durham operate at St. George's Hospital recently. It was a case of amputation, but presented nothing remarkable. Mr. Le Gross Clarke operated for a true case of galactocele, at St. Thomas', some time ago.

On Saturday last, at the Women's Hospital, Soho Square, Mr. Christopher Heath performed colotomy on a woman for cancer of the rectum. The rectum was considerably blocked up by the cancerous mass, part of which, about the size of a hen's egg, protroded externally, but the passage was not so much obstructed as to prevent the passage of liquid fœcis. In fact she had been suffering, for some time, from obstinate diarrhœa, which had irritated and excoriated the parts external to the anus. The intestine could not be distended by an enema, owing to the impracticability of introducing the nozzle of a syringe. Mr. Heath had to operate without it. He performed Callisen's operation in the left loin. Owing to the flaccid state of the bowel he had some difficulty in getting it, but finally succeeded. He mentioned the case of a lady on whom he had performed the same operation about a year ago with the most gratifying results. She suffered no inconvenience from the abnormal position of the anus, and was not only able to see her friends as usual, but also go into society. If this is the case, the mechanical arrangements must be most perfect—far more so than I have been accustomed to see in similar cases.

Mr. Erichsen recently attempted to remove a growth from the rectum, in a man, by means of the galvanic ecraseur, but he did not succeed altogether, owing the friable nature of the growth, which readily broke down under the finger.

We had a post-mortem on a case of phthisis, under Sir William Jenner, last week, in which, although the right lung was studded thickly, from base to apex, with grey miliary tubercle, and also tubercle in its latter stages, the left lung was extensively diseased, there was no marked rise of temperature, which had never risen above 100°, and very seldom was as high as that. Sir William remarked that he had seen two or three similar cases, but that it was an exception and one worthy of careful notice.

Subcutaneous injections of Atropine are sometimes used here for profuse sweating, as in phthisis; also, in the sweating of the hands and feet. It is also used as a liniment; or, rather, Belladonna, with the same object. When given internally it seems to have no effect as an antisudoral. It sometimes fails when hypodermically applied, or when used as a liniment. Dr. Ringer gives several instances of its employment in his manual of therapeutics, which is a valuable book. He also recommends nux-vomica in prolapus ani in children.

A. A. B.

London, January 30th, 1873.

Reviews and Notices of Books.

The Treatment of Syphilis with Subcutaneous Sublimate Injections. By Dr. George Lewin, Professor at the Fr. Wilh. University, and Surgeon-in-Chief of the Syphilitic Wards and Skin Diseases of the Charity Hospital, Berlin. Translated by Carl Proegler, M.D., &c., and E. H. Gale, M.D., &c. 8vo.: pp. 249. Philadelphia: Lindsay & Blakiston. 1872.

Hypodermic medication has been in vogue for many years, and is in constant use in all countries. The employment of hypodermic injection of calomel suspended in glycerine, in cases of syphilis, was introduced by the Germans some years since, and has been found beneficial in certain cases. Professor Lewin, in the work before us, lays before the profession the results of 2,000 cases in which he says he has treated the disease (syphilis) by the subcutaneous injection of the sublimate of mercury. He has enjoyed unusual opportunities, as he is the Surgeon in-chief of the Syphilitic Wards of the Charity Hospital, Berlin. It must be stated that in Berlin every prostitute is subject to a weekly inspection under the existing law, and when suspicion of syphilis exists the examining surgeon has the right of sending the patient to the syphilitic hospital for treatment. From March, 1865, up to the end of July, 1869, Dr. Lewin treated all the cases submitted to him by hypodermic injection of corrosive sublimate, and he states that of some 1,400 of both sexes so treated, not more than 20 females had returned to his wards on account of syphilitic relapses, and these were all slight in character.

It must not be thought that Dr. Lewin, in advocating this method, considers it the only means of cure to be adopted, not-

withstanding these remarkable results; he protests against being so interpreted.

To our mind this method of treatment presents several objectionable features. The difficulty of limiting the action of mercury thus given, and the pain and tendancy to the formation of abscess at the spot selected for injecting the salt. If it were possible, in every case, to be certain that a minor degree of constitutional, as well as local, irritation would follow this method of employing the salts of mercury, then would we regard it as peculiarly suitable in the treatment of syphilis; but when experience teaches that with some individuals almost an inappreciable quantity of mercury will be followed by profuse ptyalism, it is certainly objectionable to risk the possible development of symptoms which cannot well be limited under the peculiar circumstances. Still, it is a method which has been attended with benefit in the hands of eminent and careful observers, and deserves more than a passing notice.

The author, in his opening article, states: "By the new method "introduced by me syphilis may be destroyed in its various forms "when the remedy is brought in contact with the system in the "form of hypodermic injection of corrosive sublimate." This is certainly a bold assertion, and one which, we fear, will not be borne out in every case of syphilis. The instrument used is the ordinary hypodermic syringe, but the author advises, as a matter of precaution, that each patient shall retain his own needle for his own exclusive use. In the selection of the part of the body to apply the injection the author seeks those parts which are least sensitive, and he considers the infrascapular and sacral regions are the best. Care should be taken to "avoid those regions when "there is a collection of glands because tedious and chronic "abscesses may follow."

For injection the author recommends solutions in water ranging from grs. j. to grs. vi. to the ounce, and should the injection occasion much pain he adds morphia to the solution. The quantity injected at any one spot is not over fifteen drops, but these he repeats, in some cases, several times a day.

The author remarks: "Concerning the partial doses for every "administration of the injected fluid, the smallest dose is 1-10 gr. "sublimate, and the highest $\frac{3}{8}$ gr. These minimum and maxi- "mum doses I but seldom overstep, and the same are sufficient "for most cases for one and the same day. In several exceptional "cases I have used, experimentally, $\frac{3}{4}$ gr., and even a grain per "day; but we must, in these instances, be on the alert for appear- "ances of intoxication." This reminds us of the story told of an heroic hospital practitioner who always commenced his treatment

of any acute attack by what he himself termed "grand rounds," which consisted in administering to the patient, or rather ordering for him, grs. ij. of corrosive sublimate, to be followed by a dose of senna and salts. His house-surgeon always provided the whites of a dozen eggs, beaten up and ready to be taken immediately after the dose of bichloride, and by this means prevented the awkward results of such recklessness.

The rest of the work is taken up with the discussion of the appearances occurring after injection. These consist, in a detail of the local effects and general symptoms, and also what he terms symptoms of mercurial intoxication Rules for diet are given, and in the next section the indications for injection. In this we have discussed the various syphilitic affections, illustrated by cases. The states of the system which contraindicate sublimate injection are next discussed; such as age, sex, menstruation, the existence of acute disease, discrasia, &c. Then follows the quantity of sublimate to be injected, with the statistics of 800 cases and the results; subsequently the relapses, and lastly the effect of subcutaneous injection in the pregnant state, with the influence on the fœtus. Altogether, this work is well worth perusal, and the method of treatment recommended deserves a fair trial.

On the Functional Diseases of the Urinary, Renal, and Reproductive Organs, with a General Review of Urinary Pathology. By D. Campbell Black, M.D., L.R.C.S., Edin.; Member of the General Council of the University of Glasgow, &c., &c. 8vo.; pp. 300. Philadelphia: Lindsay & Blakiston. 1873.

In the preface the author states that it was his intention, in embodying "the following pages," merely to have confined himself to an article within the scope of medical journalism, but that as he reflected on the literature of the subject and threw together his ideas, the "undertaking assumed proportions which necessitated its appearance, if at all, in the form of a volume."

The work is divided into seven chapters: In the first we have considered the conditions that affect the secretion of urine, with special reference to suppression. Here are discussed departure from healthy action; excretion, how induced, and the conditions requisite for healthy action; the structure of the lungs, kidneys, &c.; the secretion of the urine, how influenced; functional diseases; anuria; suppression of urine, varieties and characteristics symptoms of suppression, how arrested; treatment of suppression; suppression from gout and rheumatism, from renal calculi oxaluria; suppression from congestion, inflammation. and other diseases of the kidney.

The second chapter is devoted to the subject of retention of urine and its causes, both physiological and pathological, together with the treatment. in both these departments we fear the author has attempted too much, as all the various causes of suppression and retention considered *seriatim*, and taken up in the order as adopted by the author, would, if fully discussed, fill a volume of three or four times the size of the present treatise. We admire conciseness, but the conciseness that amounts to the absence of discussion is unsatisfying.

In chapter three we have *fully* laid before us the subject of irritable bladder and strangury, that is if these subjects can be brought down to the limit of five pages.

The rest of the work is devoted to the consideration of spermatic incontinence, sterility in the male, male impotency, and anomalous urethral discharges. The author, in his preface, takes occasion to apologize for mentioning or taking up the subject at all. He says: "There is yet, as already indicated, a subject "treated of, of such a nature, or one that has been *made of such a* "*nature*, that a regard for one's own respectability renders it "almost incumbent to plead reasons for referring to it. I hold "the mission of the physician in too sacred a light to consider "that any ailment of the human body should be beyond his soli- "citude, and I believe that the weaknesses of our state are too "general, that any one should be visited with neglect or con- "tempt, because, forsooth, he may possibly labor even under a "self-induced infirmity. It is gratifying, therefore, to find physi- "cians of position manifesting the courage—for it can be called "by no other name—of referring to the functional diseases of the "*male* reproductive organs, for hitherto, to too great an extent, "a false and highly mischievous delicacy, to me inexplicable, pre- "vented their discussion in any beneficial way. Absolutely *there is*, "or there *is not*, such a disease as spermatic incontinence, or sper- "matorrhœa, as it is generally called. If there is, it is ours *to* "*treat it*; if there is not, it is ours *to expose the fallacy*." Of this we can merely observe that to our mind it is an apology simply unnecessary. We had almost called it by a harsher term, but we perfectly agree with the author that "if there is such a disease as spermatic incontinence, it is ours to treat it; if not, it is ours to expose the fallacy; and, therefore, there is no need offering any explanation for discussing the subject.

We are far from considering this little book an unnecessary work; we trust, however, that in future editions the author will improve on this his first effort to illustrate the subject under discussion. What he has done is well done,

perhaps too concise, but what there is of it is written in a clear and graphic style, and contains many suggestions which are worth remembering.

Clinical Lectures on the Diseases Peculiar to Women. By LOMBE ATTHILL, M.D., Univ. Dublin; Fellow and Examiner in Midwifery, King's and Queen's College of Physicians, &c., &c. Second edition; revised and enlarged; with six lithograph plates and wood cut illustrations. 8vo : pp. 241. Philadelphia: Lindsay & Blakiston. 1873.

This is the second edition of this little work. In the preface to the first edition, which appeared in 1871, the author states that "the following pages contain the substance of the lectures "addressed to the class attending the Adelaide Hospital during "the past year." These lectures were not given in any regular order; they did not form a regular course of instruction on uterine disease; but, as cases presented themselves, suitable, as illustrating any particular class of uterine affection, the author seized the opportunity and gave to the class attending the hospital a lecture on the subject, in illustration of the case presenting. The author did not intend publishing these lectures until requested by the members of the class to give them for reference a concise summary of the practice that they had seen carried out in the hospital. This, certainly, is a very commendable reason, and one sufficient for the occasion, but it is supplemented by a further statement: that in his capacity as Examiner for Queen's University, and afterwards in the College of Physicians, he was often struck by the ignorance of the great majority of candidates on the subject of diseases of women. He goes on to say that men who answered well on all other subjects were unable to state correctly a single cause "on which such a common and important symptom as "menorrhagia might depend, and consequently showed themselves incapable of treating cases in which it might occur." These gentlemen when remonstrated with, "alleged, as an excuse, "that the numerous subjects they were required to study precluded their reading the admirable but somewhat voluminous "works existing on uterine and ovarian affections, and which were "the only ones attainable." This, certainly, does not speak well for the schools at which these gentlemen received their education, as it appears to us to be an extreme state of ignorance, in a person seeking academic honours, to be unable to mention a single cause of such an affection as menorrhagia.

These lectures are fifteen in number. In the first the author gives a few general introductory remarks and then passes on to

the consideration of the mode of examination, the use of the speculum, and of the uterine sound. He presents to the reader, clearly and concisely, the necessity for digital examination prior to, or as an aid in the use of the speculum. He says: "To use "the speculum, without a previous examination by finger and "hand, is not only wrong, but fails to convey to us anything like "an accurate knowledge of the case." In speaking of a manual examination, the author alludes to the investigation of the pelvic viscera through the abdominal wall. He prefers Fergusson's glass speculum, silvered over and covered with gutta-percha, but admits that it is not the most easy of introduction; still, it is unquestionably the instrument of all others by which the best view can be obtained, when of sufficient size and properly adjusted. The use of the uterine sound is next considered, the author regarding it as one of the most useful, and, at the same time, when judiciously and skillfully handled, a perfectly safe instrument.

In the second lecture the author considers the subject of leucorrhœa, and he states that it is either vaginal, cervical, or uterine. Of the special characters of each, the vaginal is often purulent—sometimes greenish or creamy in colour; the cervical form resembles the white of egg in appearance. The discharge, when uterine, is not always definite or readily distinguishable. He is of opinion that in weak and delicate girls, when there exists a tendency to consumption, it is not unfrequently the precursor, if not the cause, of lung disease. He quotes Dr. Bennett's observations, wherein that observer noticed great improvement in many patients threatened with phthisis by the arrest, under appropriate treatment, of long continued leucorrhœa. This affection is so frequently associated with general debility of the system that its arrest would naturally follow improvement of the general health. He alludes to the distressing pruritus which accompanies sub-acute inflammation of the vagina, and states that he has found injections of tobacco most serviceable: these to be used once a day and with caution—℥j of tobacco to the pint being sufficient, to which may be advantageously added two drachms of borax.

The next four lectures are devoted to the subjects: Amenorrhœa, Dysmenorrhœa, and Menorrhagia, and, as connected with the latter, we have a lecture on Polypus, with the consideration of intra-uterine operations for the removal of such growths. The author describes a modified form of ecraseur, which he has constructed, which consists simply in permitting the passage through the stem of the instrument of two slender silver tubes identical with Gouche's canulæ, and he states that these, armed with a wire of any strength, can readily be passed up to the

base of a polypus or fibroid growth, when, by holding one firmly, the other will very materially aid the operator in carrying the wire round the pedicle; the canulæ are then inserted into the end of the ecraseur, which is thus guided up to the pedicle of the growth. The canulæ can now be removed, the wire attached to the instrument, and the operation proceeded with. It is, in fact, the adaptation of the canulæ of Gouche to the ecraseur, and, we should think, a valuable addition.

We have the subjects of Fibrous Tumours fully discussed; two lectures devoted to Ovarian disease and its method of treatment, and the concluding lectures devoted to Inflammation of the Cervix Uteri, Induration, Displacements of the Uterus, and Cancer.

The work is written in a pleasing style, and is a useful if not valuable addition to the literature on this subject. It does not alarm the student by its huge and ponderous proportions, but can be read through almost in an evening; although, perhaps, it would take a very much longer time to digest and carry away the many valuable practical hints to be found in its pages.

A Manual of Qualitative Analysis. By Robert Galloway, F.C.S.; Professor of Applied Chemistry in the Royal College of Science for Ireland. From the fifth re written and enlarged London edition. Philadelphia: Henry C. Lea. 1872.

In this little volume of some four hundred pages we find complete instructions for the qualitative analysis of every substance, proceeding from the more simple to the more complex bodies. There are tables distributed through the book by which the analyst may separate his results into groups of individuals, and then identify the individual members of each group. The members of the different groups are so contrasted with one another as to lead the student to make observations for himself, and devise modes of analysis for himself when special cases require it.

The book is divided into three parts: The first part is devoted to separation and identification of the groups of inorganic bases and acids. Part two is devoted to the more complex substances found in matters of organic origin. Part three is devoted to the various chemical analyses, the blow-pipe, and photo-chemical experiments. There is a copious list of apparatus and reagents required. At the end of each section is a series of questions which the student will do well to carefully answer, both with and without the book.

The book is nicely printed in legible type, and has been made, as the author in his preface expresses his hope that it will be found to be, a student's book. We recommend it to the earnest consideration of all students in analytical chemistry.

BOOKS RECEIVED FOR REVIEW.

The Practice of Surgery. By THOMAS BRYANT, F.R.C.S., Surgeon to Guy's Hospital. With Five Hundred and Seven Illustrations. Royal 8vo.; pp. 984. Philadelphia: Henry C. Lea. 1873.

Illustrations of the Influence of the Mind upon the Body in Health and Disease; designed to Elucidate the Action of the Imagination. By DANIEL HARK TUKE, M.D., M.R.C.P.; joint author of "The Manual of Psycological Medicine," &c., &c. 8vo.; pp. 415. Philadelphia: Henry C. Lea. 1873.

Contributions to Mental Pathology. By I. RAY, M.D., author of the "Medical Jurisprudence of Insanity" and "Mental Hygiene." 8vo.: pp. 558. Boston: Little, Brown and Company. 1873.

Wöhler's Outlines of Organic Chemistry. By RUDOLPH FITTIG, Ph. D., Nat.Sc.D., Professor of Chemistry in the University of Tübingen. Translated from the eighth German edition, with additions by Ira Remsen, M.D., Ph.D., Professor of Chemistry and Physics in Willams College, Massachusetts. 8vo.; pp. 530. Philadelphia: Henry C. Lea. 1873.

PREGNANCY WITH IMPERFORATE HYMEN.

Several cases have been at various times recorded, in which impregnation has taken place, although the hymen presented only a small opening. Dr. Karl Braun adds a remarkable instance. A married woman, aged 20, was sent to him from Galicia, to have the Cæsarean section performed, as she was pregnant, and the vulva was completely closed. On examination, there was found to be a membrane extending from the rectum to the urethral orifice, and presenting not the slightest trace of an opening. On introducing the catheter when the bladder was full, the result sometimes was the evacuation of a large quantity of urine, while, on the other occasions, only some white acid mucus, apparently vaginal, escaped. It was also found that a fine sound could be introduced into this opening and felt through the rectum, while, at the same time, the bladder was emptied by the catheter; and it became evident that the vagina opened with the urethral canal into a common outlet. Dr. Braun divided the membrane from the urethra to the rectum. The patient was in due course delivered of a healthy child, and returned home a month afterwards. Dr. Braun also adds an account of another case lately under his care, in which the opening in the hymen was only two lines wide.—*Wiener Medizin, Wochenschr.*, Nov. 9th.

CANADA

Medical and Surgical Journal.

MONTREAL, MARCH, 1873.

THE CHOLERA AND QUARANTINE.

Of the contagious character of cholera there can be no doubt. Cholera appears to follow the highways of international intercourse. In India it accompanied the crowds of devotees from the holy fairs. In Persia, Egypt, Arabia and Turkey it becomes the companion of pilgrim and merchant, who travel in caravans. In Europe and our own country it follows the ordinary direction of human travel. Cholera has for some years past been hanging about Persia and some parts of Russia, so that it becomes a question if it may not be regarded as endemic in those countries. During the past year it has shown a tendency to advance westward and northward. In June and July it invaded St. Petersburg, Moscow, Berlin and other European cities, remaining until the end of September. Fortunately it did not exhibit that tendency to diffusiveness that has marked other epidemics of the disease. Throughout the winter it has been observed in various parts of Hungary and Galicia. Occasional outbreaks at different points giving a warning grumble that it still held a foot-hold and might break forth with increased virulence and spread with its usual rapidity. These facts being undeniable, as they are matters of history, it becomes a consideration how far the disease can be arrested or stayed in its onward progress by careful isolation, strict quarantine and the adoption of sanitary measures. All towns and cities should take warning, having before them the experience of Berlin. That city lost, in a few days last year, several thousands of its inhabitants by cholera, and, at the time, it was stated that the invasion of the disease was due, in a great measure, to the insanitary condition of that capital. It has long been known that filth and disease are boon companions, where the one exists the other is sure to present itself in some form.

That the advance of the disease, cholera, can be arrested in its onward progress we fear is impossible. Still we have the experience of Halifax and New York three or four years ago, when, by

strict quarantine and almost complete segregation, the spread of the disease appeared to be stayed. We can at least endeavour to arrest its progress by all precautionary means at our disposal. First—we would advise a thorough cleansing of our cities and towns, dwellings and localities. Let every good man be personally interested in the work. Our own city of Montreal, in a sanitary point of view, resembles somewhat Berlin, because there is running almost through the heart of the most populous locality a sluggish sewer, which is always two-thirds full of drainage from the higher levels of the town. We allude to the Craig street sewer, that monument of engineering skill. The emanations from that sewer have tainted the air of the whole city for some years past. We cannot see what is to be done as a remedy, as there is not sufficient time to enable us to make the necessary outlet at Hochelaga before the advent of cholera, if cholera we are to have.

As regards quarantine, we think it highly necessary that very strict measures should be insisted on. There should be no shirking of responsibility, no hesitation. Steamships as well as sailing vessels should be subject to the same quarantine regulations, more especially if they carry emigrant passengers. This may possibly interfere with the moneyed interests of individuals, as their traffic may for a time be stayed, but it will undoubtedly prevent the introduction of the disease, cholera, by the way of the St. Lawrence. There are persons who contend against the advantages of quarantine; with such there is no use wasting time in argument, because if they remain unconvinced in the face of the many facts bearing on this subject, no species of argument would suffice to alter their distorted views. Statements are often advanced of the inefficiency of quarantine, but, as a general rule, it has been found highly efficient in arresting the spread of epidemic disease. If it does not prevent the introduction of disease, at least it induces a feeling of public security, which is in itself beneficial, and will prevent the occurrence of that panic and fear of impending evil which is so often witnessed in small communities; besides which, we should ever bear in mind the good old maxim that "an ounce of prevention is better than a pound of cure."

BILL—"AN ACT TO AMEND THE ONTARIO MEDICAL ACT."

We have received several copies of the bill of amendment to the Ontario Medical Act which is before the Local Legislature at present in session at Toronto. In returning thanks to our several friends for affording us a chance of seeing the bill in question, we construe their action into a request for our opinion on the subject.

Medical men are, as a rule, bad legislators, and certainly this bill fully bears out that assertion. We will copy in *extenso* those clauses which are most objectionable, and which will give our readers an opportunity of seeing for themselves a portion, at least, of this remarkable document.

In section ten of the bill we read: "And the following shall be "sub-sections, four, five, six and seven of section twenty-three of "the said Act:

(4) "From and after the passing of this Act each member of the "College shall contribute not less than two dollars, nor more than "five dollars, in each year, towards the general expenses of the "College, in return for which he shall receive an annual license, "which said sum shall be payable on the first day of Janu-"ary in each year, and that it shall be in the power of the Coun-"cil" to collect such fees, &c., * * * "and that the fee "for the annual license, for the year one thousand eight hundred "and seventy-three, shall be fixed at two dollars, and shall be pay-"able the first day of May next ensuing."

(5) "If any member of the College of Physicians and Surgeons "of Ontario shall fail to pay his annual contribution, otherwise "called annual license fee, before the first day of June in each "year, his name shall not be entered in the published register of "that year; and shall not be so entered unless he pay, over and "above all arrears and fines, the sum of two dollars.

(6) "No member of the College whose name has been left out "of the Annual Register, in consequence of not having paid his "annual contribution or license fee, shall enjoy any of the privi-"leges of his registration, but he shall be liable to any pains or "penalties that may be imposed by this Act, or are now in force in "the Province of Ontario against unregistered practitioners."

On looking a little further on in the bill, at section twenty-two, we find the following, which is intended as an amendment to section forty-one of the Medical Act:

(3) "Any person, not registered under the said Act, who shall "take or use any name, title, addition or description, implying or "calculated to lead people to infer that he is registered under the "said Act, or that he is recognised by law as a physician, surgeon, "accoucheur, or a licentiate in medicine, surgery or midwifery, "shall, upon summary conviction before any justice of the peace, "pay a penalty not exceeding one hundred dollars nor less than "twenty-five dollars;" and at the latter part of sub-section five, "and such justices shall have power to award payment of costs in "addition to the penalty; and in case the penalty and costs "awarded by him be not, upon conviction, forthwith paid, to com-

" mit the offender to the common gaol, there to be imprisoned for " any term not exceeding three months, unless penalty and costs " be sooner paid."

We have copied these clauses in full for the purpose of laying before our readers the bearing of the whole matter. We are not personally concerned in this bill and therefore are open to a hint to mind our own business, but as a public journalist we deem it a privilege to take up any question which is fairly before the public and discuss it. If we resided in Ontario we would oppose the passage of this bill of amendment in its present form, and if we failed, and that the Legislature of Ontario forced a bill of such a nature on the country, we would consider it a duty still to oppose it and test its legality. The profession in Ontario has been sufficiently degraded already, and however happily the Ontario Medical Act works to the exclusion of legally recognised quacks, it is powerless in repressing quackery. All those questionable members—members without qualification, who were in actual practice prior to the passing of the Ontario Medical Act, were admitted into the fold, and to day hold the same legal status as do those members who fought for their spurs and won them honourably. But has the Ontario Medical Act put a stop to the practice of unlicensed men? Is it a fact that a large number of persons, year by year, go forth to the public in Ontario to practice medicine as Eclectics or Homœopaths without legal qualifications? What is the meaning of the remonstrance of the medical students of last November? The Ontario Medical Act has, without doubt, put a stop to any further legal recognition of Eclectics and Homœopaths. Persons hailing from, or pretending to be educated as such, will not submit to the required test by examination, even if they possessed a curriculum, because they could not come up to the required standard. Being, therefore, shut out from the possibility of obtaining a license by examination, they practice without it. Where is, then, the advantage of this boasted Ontario Act? Why is the Council not honest enough to admit its impotency? The Ontario Medical Act is signally a failure. The tenor of this bill of amendment is a tacit acknowledgment of its failure.

But having failed to give protection to honest men, upon whom it has been seriously oppressive, another scheme is submitted to the profession, and it is informed by official circular, emanating from the office of the Registrar of the College, that unless the profession agrees to the scheme of issuing an annual licence, the amendments to the penal clauses of the bill will be withdrawn. Thus the Medical Council, not content in putting an insult upon the profession generally by placing it on an equality with irregular prac-

titioners, seeks further to degrade the profession by sinking it to the level of the rum-seller. The College of Physicians and Surgeons of Ontario require means for its support; this is admitted; it is a just claim, and we doubt not that the profession will fully acknowledge its indebtedness; but in doing so, we shall wonder greatly if it surrenders rights that it at present possesses, and that without the certainty of an equivalent.

The profession in Ontario has representation at the Medical Council by the election of members for certain territorial divisions. The qualification of the electors appears to be the fact of registration Why not add to this an annual payment of a fee which shall be payable on the 1st January in each year. Those who fail to comply with this tax should be disfranchised. But to force upon the profession the support of a College which has done nothing but divide amongst its members an annual sum of some thousands of dollars does not appear fair, nor do we think the profession will agree to it. In the Province of Quebec a different state of things is seen. 'Tis true we have no central examining board, that is, we fully recognise the diplomas of all Canadian Universities in good standing, and grant our license ad practicandum on payment of fees without examination. Our meetings are held alternately in the cities of Quebec and Montreal, and are attended by a full board of 36 governors. At each meeting governors coming from a distance receive the specific sum of ten dollars for their expenses. It may be stated that some of these gentlemen come from near about Gaspé, and in the spring of the year must lose the greater part of a week before they can return to their professional avocations. Let it be understood that it is *not ten dollars a day*, but simply and only ten dollars current money of Canada. It matters not if they are engaged on College business for a month—the amount allowed is the same. Hence there is no object to prolong the meetings. We meet for specific business, and that business we transact in a business way. We have been told that candidates for examination before the Ontario College cannot possibly get through short of three weeks. We have heard that candidates last year were kept running after the Registrar for days at a time, and, strange to say, he never put in an appearance. We know that some of the men who fyled their credentials with the Registrar lost them; but we observe that the College has, wisely we think, substituted an old pine knot for the late official, who is represented as a man who will perform his duty with tenacity, regularity and precision. It need not be wondered that there is no urgent necessity to push through business by the Ontario board, because, as a placebo, "the medical gentlemen who come to conduct the

"examinations must be paid" (at the rate of $10 per diem, so we have heard). "These gentlemen, it had to be remembered, in "coming to conduct the examinations of students, were not "merely giving them the benefit of their skill and experience, "and putting themselves to considerable trouble and expense, "but they were leaving their practice for the time being, *which* "*was a very great loss*" We must be excused for quoting the speech of Dr. Campbell, as reported by the Toronto *Globe*, who acted as chairman of the Council when the deputation of medical students was received in December last, but it is so excellent and appropriate that we could not forego the pleasure of reproducing it.

OBITUARY.

At a meeting of the Medico-Chirurgical Society of Montreal, held on the 7th February ult., the following resolution was unanimously adopted:—

"*Reso'ved*,—That the Medico-Chirurgical Society of Montreal "record with deep regret the death of their late friend and "associate Dr. William Sutherland, Junior, whom they have ever "esteemed as a young gentleman of high character and bright "promise; and the members of this Society further extend their "heartfelt sympathies to the family of deceased in their great "bereavement."

The Secretary was instructed to forward a copy of the above resolution to Dr. and Mrs. Sutherland.

Dr. William Sutherland had been in declining health for the past two years. He was noted for his amiability of character, good heartedness and ability in his profession, and we doubt not that, had he lived, he would have become, like his father, an ornament thereto.

We tender to our old and respected colleague and to Mrs. Sutherland our most cordial sympathy and condolements under this bereavement.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

At the annual meeting of this Society, held on the evening of Wednesday, 5th February, the following gentlemen were unanimously elected office-bearers for the year:

Dr. John Mackelcan, - - -	*President.*
Dr. D. Mackintosh, - - -	*Vice-President.*
Dr. C. O'Reilly, (re-elected), - -	*Secty.-Treasurer.*

The thanks of the meeting were cordially tendered to the retir-

ing office-bearers, and to Dr. O'Reilly, for their valuable services during the past year. The meeting was largely attended and marked by great unanimity, both in the election of office-bearers and in the discussion of several matters of great importance to the medical profession. The affairs of the Society are so flourishing that it was deemed advisable to look out for a room suitable for a reading-room and library.

We take the above from the Hamilton *Evening Times* and are happy to see that our brethren in Hamilton are emulating other Western cities in the advancement of scientific medicine and surgery. We hope to receive, for publication in this journal, further evidence of the life and earnestness of the Hamilton Medical and Surgical Society.

STRUCTURE OF THE SCALP OF THE NEGRO.

In a paper read before the Microscopical Society, and reported in the *Monthly Microscopical* Journal for the present month, Mr. Charles Stewart gives the result of his investigation upon the appearance presented by sections of the scalp of the negro. In this, he says, besides the dark colour which is due to extra pigmentation of the deep layer of the epidermis, there are certain peculiarities that have not received general attention. The scalp is altogether thinner, and the hairs and follicles present the following remarkable differences from those of the European. In the first place, the portion of the hair and follicle imbedded in the skin is much longer, and is also remarkably curved, so that it commonly describes a half-circle. The papilla at the base of the follicle consequently either lies horizontally or even becomes directed obliquely inwards towards the subjacent bone. Lastly, the sebaceous gland is somewhat smaller.

RELIGIOUS MANIA.

A singular case of self-mutilation has recently occurred at Leicestershire, England, which was apparently prompted by a rather literal reading of that part of the Scriptures, "If thy right hand offend thee cut it off." The Rev. W. March, late curate of Melton Mowbray, requested his friend, at whose house he was staying, to take out his right eye. On repairing to his apartment that gentleman found that the reverend gentleman's right hand was severed from his body, and that he was endeavouring to pluck out his right eye. Medical assistance was summoned. Mr. March remained calm, did not appear to suffer pain, and throughout, complimented the surgeons on their skill and dexterity in performing amputation, which was found necessary, thus exhibiting that absence of the sense of pain so frequently met with in acute mania.

We remember, some years ago, the case of a criminal who had been condemned to death for murder. There was some question as to his sanity, and the gaol surgeon, with several other medical men, decided the subject by making him expose his back, when a red hot iron was applied at several points, the prisoner never wincing or exhibiting the slightest suffering under the infliction. Execution of the sentence was stayed, and the unfortunate man sent to an asylum for the remainder of his existence.

We copy the following from the columns of the *Salt Lake Daily Herald* as a specimen of gratitude amongst the saints of Salt Lake City. A somewhat similar course is sometimes practised by the sinners of ther localities:

PRO BONO PUBLICOLA!

By God's Grace: I do hereby certify that on this blessed day of our Lord, December 24th, 1872, I called on Dr. Plant, Phillips' Buildings, Tenth Ward, of Salt Lake City, who, after prescribing certain remedies to him best known, &c., caused me to be delivered of a

MONSTER TAPE-WORM, 123 FEET LONG.

And I do hereby tender my humble and heartfelt thanks to Dr. Plant, after being troubled with the monster twelve years, for such a deliverance.

Signed, this 24th day of December, 1872.

TEUCUM KEMPTON.

Residence at Bingham Canyon.

LAST WORDS ABOUT THE EPIZOOTY.

These last words are in the form of horse doctors' bills. We have seen several, but the following from a St. Louis veterinarian is the most striking:

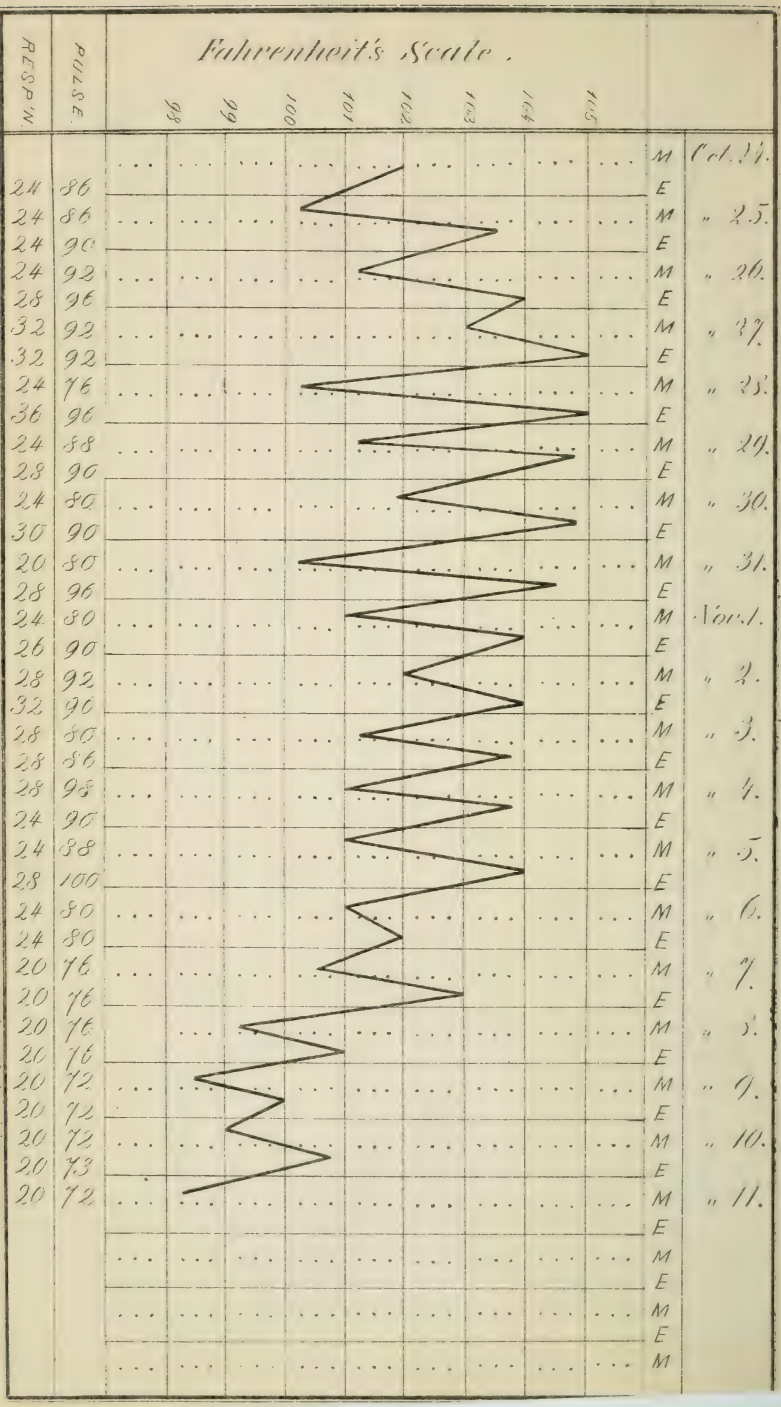
Sant Lewis Ganewerry the 4d 1873

Mr. ——— to james HanKox

Vetturerinary physickian and Surgeant Dr.

Too medikle advice twict	$ 3 00
Konsultation over a ded mare sed too hev hed the eppzout.	75
Goin to see two sick hosses in the nite (very cold)	2 00
To treatment of a kream kolered hoss two days with medisuns	4 50
To making an obstetrikul examinashun of a hosses throat.	1 50
To settin up all nite in a barn with a sick hoss	2 50
To writin a preeskripshun for botts. & also one for spaving	1 00
To holding a postmortim examinashun on a hoss who afterwards recovered	1 50
To givin my opinyun one day on the street regardin the kause of the zoot	4 00
Totil	$20 75

The gentleman who received the above will not contest the same on account of the charges, but will pay it cheerfully as soon as he receives a remittance from his parents.


RESPN.
PULSE
Fahrenheit's Scale.
98
99
100
101
102
103
104
105
M
E
Oct. 24.
" 25.
" 26.
" 27.
" 28.
" 29.
" 30.
" 31.
Nov. 1.
" 2.
" 3.
" 4.
" 5.
" 6.
" 7.
" 8.
" 9.
" 10.
" 11.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Valedictory Address to the Graduates in Medicine and Surgery, on behalf of the Medical Faculty McGill University. Delivered at the Annual Convocation held in the William Molson Hall of the University, on the 28th March, 1873. By GILBERT PROUT GIRDWOOD, M.D., M.R.C.S., Eng.; Professor of Practical Chemistry.

GENTLEMEN GRADUATES: In the name and on behalf of the Professors of the Faculty of Medicine, among whom I have the honour of enrolling my name, I congratulate you on receiving, at the hands of the Principal, the highest honours this University confers on its graduates, as a reward for the patience with which you have listened to her teachings and the assiduity with which you have prosecuted your studies. Gentlemen, in accordance with a time-honoured custom, I take this opportunity to offer you a few words of advice on entering upon the active duties connected with the practice of the profession you have chosen. You have this day received your degree of Doctor of Medicine and Master in Surgery as a reward which has been hardly earned, as you know full well, and well deserved, as your examiners can testify. It is now placed by your Alma Mater in your hands; love, honour and respect it: keep this honour as a bright jewel; wear it as an ornament: be careful not to sully its brightness; but, continuing in the steps in which you have already commenced, add lustre and brilliancy to it by the conscientious performance of the duties required of you. You will thus make your degree, your University and your country respected wherever you go. The grade which you have this day taken places you, as members, in the ranks of the noblest and most honourable of professions. Noblest and most honourable in its objects—relief of human suffering and salvation of human lives—whereby you are led to follow in the footsteps of our great Master "who went about doing good and healing all that were oppressed." You now start out into the world to fight your own way; the eyes

of the world are upon you; but, believe me, your studentship is not over; it is but commencing; you have, as it were, laid the foundation of the building; from that foundation may you raise a superstructure of learning perfect in all its branches and honourable to your teachers. You will find your late instructors, friends ever ready and willing to give you a helping hand in all cases of danger or of difficulty. Remember always that their reputation, as well as your own, is at stake in the manner in which you perform your duties. During the four years hard study you have just completed you have had an opportunity of becoming intimately acquainted with the wisdom, order and method with which man, that noblest and most perfect of the great Creator's works, has been formed. Let this knowledge be a guide to you through life. Strive to be wise in your conversation, orderly in your conduct, and methodical in your habits. As you find from your studies, especially from your microscopical inquiries, that nothing has been so small or so unimportant as to have been overlooked in the scheme of man's creation, so I strongly urge you to consider nothing too minute or too insignicant for your observation and earnest inquiry. Through the medium of those wonderfully organized senses with which we are endowed, impressions are conveyed to our perceptive faculty; from the observance and storing-up of these impressions or experiences, our mind is enabled to reduce chaos to order and recognize the laws which govern the universe.

Gentlemen, in the selection of a profession I hope you were not actuated by avaricious motives; if so, you will be grievously disappointed. You, if successful, as I trust you will be, in the treatment of disease, will probably also be successful in a pecuniary sense; but do not hope to lay up riches by the practice of your profession. If that be your expectation it were better you should retire from it now than hereafter experience disappointment. You will have to be at the beck and call of your fellow-man; practice self-denial; maybe you will have to listen even to abuse from the ignorant. You will be called upon to combat the prejudices, ignorance and uncontrolled passions of mankind; to meet with difficulties, disappointments and, maybe, with defeat; but, by knowledge and perseverance you will overcome the former, and by a consciousness of having performed your duty you will be able to bear the latter. In contending with the dangers which beset your pilgrimage you will frequently experience consolation and rewards which will yield you a pleasure beyond that arising from the mere receipt of money; a pleasure of a more congenial and, certainly, more enduring kind. Often you will return home exhausted and dispirited, and without the hope of remuneration;

then let memory bring to your mind's eye that poor, suffering, human sister who, with tears of gratitude in her eyes, has returned you her thanks, heartfelt thanks, for the relief you have afforded her pains; or, the moment when some gigantic brother in Adam has prostrated his form before you in the anguish of pain, and your knowledge, the result of your earlier labours, has enabled you to relieve his torture, and you received his expressive grip of gratitude, then you will consider those thanks and that gratitude of more value than fine gold. Let this day be a red-letter day in your calendar, and when the months returning bring back this day of honour, if I may so call it, your Ides of March, pause, think over the past twelve months; see if you have performed your allotted task to your own satisfaction; and then, with augmented strength gathered from past experience and former trials, start again in life's battle with a determination to increase your store of knowledge. Observe facts and record your observations carefully and in order, remembering that it is only by obeying the laws of nature that she will reveal herself and her regulations to you. Learn to write well, clearly, distinctly and to the point. By frequent practice you will acquire freedom of thought, clearness of diction, and force of expression, which will add a charm to your writings beyond their immediate professional importance. To aid you in this, study the writings of masters, other than simply professional authors; for it is considered one of the characteristics of a gentleman that he be well read.

Passing from generalities to your more specific obligations you are called upon to be loyal in all your relations in life. I may divide those obligations under three heads: To yourself, to your profession, and to the public. Firstly, to yourself, because self-preservation is the first law of nature. Secondly, to your profession, because your immediate brethren have a claim to your sympathies greater than others. Thirdly, to the public, as brethren of a common race. To yourself your obligations require you to judge your own actions, words and motives; cultivate knowledge from a love of itself; enlarge your views by frequent conversations and arguments connected with your duties; keep yourself instructed in the current literature of your profession, and think no time or money ill-spent which will add to your knowledge or usefulness; unite with your professional brethren in your neighbourhood to form societies for the reading and discussion of papers and the mutual interchange of ideas; ally your local societies with the Dominion Association, so that we may form a united society which will become a rallying point, such as is the association which has done so much good to the profession in the old mother

country, around which we may gather, and from whence we can put forth those doctrines and regulations which will keep out of our ranks the quack and the impostor, and will enable us to frown down any attempt to introduce charlatanism or roguery that may occasionally be made, and enable us to exclude from our ranks those who, although they may have proved themselves possessed of the required standard of professional education, are found wanting in the principles of morality. Be careful to observe the human frame especially in health, so that you may be the better enabled to notice any deviation from the proper performance of its functions and recognise the cause. Form your opinion slowly, and be sure it is on a sound basis, so that once formed you may be able to express it in a firm, manly, but gentle manner to others. Cultivate your senses, try them in different ways, and correct any false impressions. If possible, educate your sense of touch so that you may realize, in the dark, the form, shape and hardness of bodies with which you may come in contact; this you will find of great value to you, and may enable you to diagnose disease in positions where the eye cannot be brought into play. Exercise your eye, for it, perhaps, is the most useful sense in recognizing morbid changes, whether of expression or of structure, microscopic or otherwise. Forget not the use of the sense of smell; it may assist you in determining the peculiar disease your patient is suffering from; or, by the odour simply you may be able to detect at once the presence of a deadly poison and immediately administer an antidote which may save or prolong life. The sound which reaches you from an invalid's chamber may inform your tutored ear of what is going on within, and may enable you at once to grasp the case on entering. Education and practice of this kind will give you a sense of knowledge and a feeling of self-reliance that will increase and give value to your mature experience. No man requires more self-reliance and more to be master of himself than he who undertakes to minister to the "ills that flesh is heir to": be, therefore, ever ready and watchful, govern yourselves moderately and temperately, and be careful not to expose yourselves to the charge of not carrying out in your own case the counsel you give to your patients. *Experimentum fiat in vili corpore.*

To your professional brethren—for to-day we rank you as members of that fraternity—let your conduct be guarded; be loyal to them as to yourself; be careful of their honour as your own: speak no evil of any of them yourself; neither listen to nor allow another to do so in your presence, but rather throw a cloak around the shortcomings of a brother. Should you have differences with any

of them keep them to yourself; let not the outside world know of them, and be ever watchful lest you say an uncharitable word or do an unkind act. When in consultation with a brother give your opinion firmly but with diffidence, for there may be points overlooked by you which his more acute observation may have detected. Listen to your brother's counsel with deference, and if you should disagree in opinion carefully go over, with him, the case, and be convinced or convince him, as you may find the balance of argument for or against yourself—a human life may be in the balance. Be ready at all times to give advice or time to your brethren, you know not how soon you may require their assistance yourself. To them, more especially, observe that divine rule of morality, "whatsoever ye would that men should do to you, do ye even so to them."

To the public your obligations are, indeed, great, and you have an exacting master to serve. Your obligations may be considered of a three-fold character: To your patients, to your nation, and to the human race. *To your patients* be ever kind and gentle, in deed, word and action; in every examination it may be necessary to make put them to as little pain, mental or physical, as possible; the sufferings for which they seek your advice are sufficient, without your inflicting on them additional pain. Be patient during the recital of their ailments, whether real or imaginary, and do not forget that pleasure or pain is far greater in anticipation than in actual reality.

> "Can wisdom lend, with all her heavenly power,
> The pledge of joy's anticipated hour;
> Ah, no! she darkly sees the fate of man,
> Her dim horizon bounded to a span;
> Or, if she hold an image to the view,
> 'Tis nature pictured too severely true.

Give your patient the pleasure of seeing you interested in his case, and feeling that in you he has a friend and, maybe, a confidant; one on whom he can rely for support, and in whom he can repose trust in the hour of need. Keep notes of your cases for future reference; they will form an invaluable record, not only for your own consultation, but for the profession of which you are a member. Be careful how you enter the invalid's chamber; your patient will watch your countenance with an anxious glance and often take ideas from your expression at variance with your views and injurious to the well-being of the sufferer. Let the expression of your countenance be, at least, hopeful; cheerful, if possible; your speech gentle, but distinct in utterance. Make your inquiries in an earnest manner and tone of voice; not hasty; not pausing from indecision. Avoid depressing topics in your conversation;

have some light and interesting subject ready, so that in a few words you may start in your patient's mind some ideas on which he may dwell, and with which he may while away the monotonous hours of a sleepless night. Be physicians to the mind as well as the body. Remember above all things that good nursing is often of far more avail than the best advice or medicines. Make friends of those around your patient, as they may help you in the treatment of your case. Be not satisfied with reports, but see for yourself that your remedies are properly applied and your instructions punctually attended to; that your bed-ridden patient is not reclining for hours on folds of clothing or irritating bread crumbs, which may be trifles to the healthy, but fatiguing annoyances to the invalid who may be unable to call your attention thereto. Oftentimes you will be made the recipient of family secrets, and your advice may be asked on them. Refrain from interfering in such matters, but, when asked, give your opinion unflinchingly on the side of truth and justice. Upon these points never allow yourselves to speak to any one except the individuals immediately interested. Keep all these secrets, as well as the ailments of your patients, to yourselves. Look upon such communications as a sacred trust.

To your nation be loyal to the laws of the land, to the institutions of your country, and to our Most Gracious Queen, whom God bless and honour, may she live long. Ay! long enough to see the mighty empire whose destinies she has swayed so happily united and consolidated into a harmonious brotherhood.

To the human race, in whatever land your lot may be cast, submit yourselves to all lawfully constituted authority. All cannot be first, "for as one star differeth from another star in glory," so, also, one man differeth from another. One man must lead; others may follow and shine in greater or lesser magnitude. Encourage education; not simply the learning of languages, but the learning of nature. Examine her wondrous works in whatever way they may be presented to you; record any facts you may observe, for, if recorded, they become of use to succeeding generations, and thus you will stamp your impress on society and live in posterity.

"Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time.

Footprints that, perhaps, another
Sailing o'er life's solemn main,
A forlorn and shipwrecked brother
Seeing shall take heart again."

Strive, if not to be first, at least to be in the front rank. There

are many subjects yet unexplored, and many a field as yet uncultivated, upon which you may direct your attention, and to which, as a pioneer, you may devote your fresh energies. If you prefer a nomadic existence your professional knowledge will be of great service to you, and will often carry you unscathed through dangers that, but for your acquaintance with medicine, might have cost you your life. Disseminate the truths of Hygiene; encourage all matters connected with public health or which may tend to increase the happiness or longevity of your race. The interest taken by the public in your profession is made evident to you this day, not only by the number of gentlemen present, but, also, by the number of ladies who have graced by their presence the ceremony through which you have just passed.

Gentlemen, I recommend each of you, as soon as your circumstances permit, to bless yourselves with a wife; for King Solomon says, "Whoso findeth a wife findeth a good thing." As a married man you will be more respected by your neighbours, will enjoy more comfort at home, and will have a never-failing friend and adviser. *Olim, meminisse juvabit.* Fare ye well.

Case of Chronic Pleurisy with Effusion—Tubercular Disease of Opposite Lung — Otorrhœa — Tubercular Meningitis — Coma — Death. Under the the care of GEORGE ROSS, A.M., M.D.; Attending Physician Montreal General Hospital; Professor of Clinical Medicine McGill University. Reported by Mr. W. D. Ross.

A. S., aged 21, a native of Austria, sailor, was admitted into the Montreal General Hospital, under the care of Dr. Ross, on the 1st of October, 1872, complaining of cough and shortness of breathing. It appears that he had been in hospital for a few days during the month of June last, with general debility and loss of appetite, for which he had taken, with benefit, a mixture of Quinine, Aromatic Sulphuric Acid and Tr. Columba. On this occasion, also, he had once complained of some pain in the left ear, for which glycerine had been ordered. He is of thin, spare habit of body; looks anæmic and unhealthy. Owing to his speaking but very little English it was difficult to obtain any accurate account of his history from the time of his discharge from hospital in June last. Indeed, it may be mentioned that throughout the case, owing to the unfortunate circumstance of his foreign language, it was always very hard to clearly understand the nature of the various subjective symptoms which he endeavoured to

make known to us. It would appear, however, that on discharge he had left Montreal and gone to Quebec, at which place he was seized with an acute illness which, we gathered from him, was accompanied by fever, cough, very sharp pain in the left side, and and great difficulty in breathing—evidently an attack of acute pleurisy of that side. He went to the Marine Hospital where he remained during the following nine weeks. At present complains of some cough and shortness of breath, the latter increased upon any exertion, and he has remained feeble and listless; his appetite, however, is tolerably good; his bowels regular; tongue clean, and he sleeps fairly at night, always lying upon the left side. Inspection of the chest at once revealed the fact that expansion-movements of the two sides of the chest were extremely unequal, the right side moving freely and equably in all directions, whilst the amount of motion on the left side was very slight and principally of an upward character. By placing the hands upon the chest this greatly-diminished expansion of the left side was fully confirmed. Bulging of the same side was also observed, whilst the intercostal spaces were full and rounded on that side, but hollow and showing the projecting ribs upon the right side. Measured just below the nipples, the left side was 17½ inches, the right side 16½ inches. Percussion showed toneless dullness below the third left rib, with strong resistance to the finger; whilst above this it was high-pitched and approaching to being tubular in character. Over right lung clear throughout. Respiration on right side, both front and rear, exaggerated: on left side, feeble, slightly blowing respiration in the infraclavicular region, and below this absence of all breathing sounds. The back of the left chest is also silent, except at the root of the lung, where breathing is distantly heard. Vocal fremitus and resonance appear normal on the right side, whilst upon the left both are entirely annulled. The heart is displaced to the right, the apex found beating under the ensiform cartilage. Pulse, 116; respirations, 32 per minute.

Ordered: ℞ Syrup Ferri Iodid, ℥vj.: Aquæ, ℥vj. M. Sig. One teaspoonful to be taken every two hours: and the following lotion to be applied to the chest on lint: ℞ Iodi, ℈iss,; Potass. Iodid, ℥i.; Aquæ ad., ℥vi.

10th Oct.—Pulse, 124; respirations, 24; seems to suffer very little distress; lies on either side or upon the back; at times his cough is rather troublesome, but is accompanied by very little expectoration; complains much of the local application, which has much reddened and slightly blistered the side, and can with difficulty be persuaded to allow it to be applied; appetite and general condition rather improved.

18th Oct.—Pulse, 100; respirations, 24: measurements of the chest same as on admission; a few small, bubbling râles are heard in the right infraclavicular region and at the right base posteriorly, but no perceptible alteration of the percussion sound.

30th Oct.—Pulse, 112, respirations, 28; has complained of headache for two or three days, and says it prevents his sleeping at night; the bubbling râles before-mentioned are found to persist and are now heard over nearly every part of the right lung; cough is somewhat troublesome, and the expectoration rather increased in amount, and muco-purulent.

6th Nov.—Complained, to-day, of pain in the left ear, for which warm olive oil was to be dropped in thrice daily. The earache continued till 11th Nov., at which date it is reported as rather increased and accompanied by a continuous hissing sound and a blister was ordered behind the ear. The moist râles persisting over the right lung, Biniodide of Mercury ointment was prescribed to the right infraclavicular region twice a day, and to take the following mixture: ℞ Pot. Iodid, ℈iv.; Vin. Colch., ʒvijss.: Acid Hydrocy Dil., ʒss.; Ext. Senegæ Fld., ʒiv.: Aquæ ad., ℥viii. M. One dessertspoonful every three hours.

17th Nov.—Pain in ear has gone; has had considerable night-sweating lately.

28th Nov.—No return of earache; percussion over left lung clear to third rib. Ordered: ℞ Ammon. Iodid, ʒij.; Syrup. Ferri Iodid, ʒvi.; Tr. Conii, ℥iss.; Tr. Gentian Co., ℥iiss.; Aquæ ad., ℥viii. M. One tablespoonful three times a day.

23rd Dec.—Measurements of chest: right side, 16½ inches; left side, 16¾ inches, being a diminution of ¾ inch in favour of the left side since the time of his admission.

From this time he seemed to fail in strength and remained almost altogether in bed.

2nd Jan., 1873.—Condition of left side unaltered; the moist râles continue to be heard over almost every part of the right lung, and decided gurgling is found in the infraclavicular region of the same side. It was now evident that there was extensive tubercular deposit, softening and excavation of that lung.

13th Jan.—Again complained of pain in left ear, and slight purulent discharge is observed coming from it. Ordered: Tr. Opii to be dropped into the ear three times a day, and a warm poultice to be kept to it.

18th Jan.—Pain has decidedly increased, and now seems to radiate over the whole of the left side of the head, and to be rather exacerbated at night; refuses his food, and seems very dull and desponding. Ordered: Hydrat Chloral, ℈i, each night.

24th Jan.—Pulse, 124; respirations, 44; temperature, 100 2-5 °; has been daily becoming more and more dull and stupid; to-day seems to fix his eyes only with a dull, vacant stare, and can with difficulty only be induced to make any response whatever to the simplest question; makes no complaint of pain; coughs very little; refuses food; has had no vomiting; bowels moved daily. Ordered blister to nucha.

25th Jan.—Pulse, 128; respirations, 42; temperature, 101 2-5 °; to-day quite stupid; insensible to all external impressions; does not speak at all; if loudly spoken to will look round, but that is all; will not obey any order; generally lies with his eyes wide open and much suffused, presenting a vacant and staring expression; pupils large but equal, and acting slowly with light.

27th Jan.—Much the same condition; pulse, 128; respirations, 46; temperature, 100 4-5 °; passes both urine and fæces in bed.

28th Jan.—Profound insensibility; cannot be made to exhibit the slightest sign of having heard, even when loudly called to; pupils moderately dilated and hardly at all answering to light; the right rather larger than the left; slight internal strabismus of the right eye; paralysis of right side of face setting in; in it, also, reflex action is subdued; the corner of that eye can be freely touched without eliciting any response; touching the left eye, however, causes him to wink somewhat and to shut the eye vigorously; he is observed to move both arms and legs; the tongue is dry and brown and sordes are rapidly collecting on the teeth; pulse, 124; respirations, 44; temperature, 100 3-5 °; as there was retention of urine a catheter was passed and the urine examined; it was scanty, high-coloured and ammoniacal, but contained no albumen.

29th Jan.—Pulse, 140; respirations, 50; temperature, 100 3-5 °; hemiplegia of right side has set in; face, arm, and leg, all motionless; left hand kept constantly in motion, as though grasping at some imaginary object; quite comatose, with marked internal strabismus; pupils dilated, the right rather the larger of the two. Died at 5 p.m.

POST-MORTEM TWENTY HOURS AFTER DEATH.

Brain.—On removing the calvarium the dura mater was found to be healthy throughout—smooth, not injected nor inflamed. The entire brain weighed 45½ ounces. On removing the dura mater it was seen that the vessels of the whole of the left hemisphere were intensely injected, contrasting strongly with those of the opposite side, which presented the normal appearance. Just at the centre of the lateral portion of this left hemisphere there

was a patch of diffused, dark, blood-staining, somewhat resembling what might have been left behind from a severe blow or bruise. It is of about the size of a dollar, irregular in outline, and of a deep crimson-red colour. The arachnoid, generally, in this side, appeared hazy, and in some of the sulci there was some serous effusion. Along the course of all the main vessels supplying the darkened region referred to was observed a deposit, sufficiently copious, of yellowish, opaque, almost purulent-looking lymph, and on tracing these vessels downwards the same was found to follow them all the way down along the fissure of Sylvius to the base of the brain. Opacity of the arachnoid and effusion of opalescent lymph was seen over the optic commissure and nearly all the parts both anterior and posterior to this, upon the base of the brain. No tubercles proper could be found in this region, but on subsequently cutting into the substance of the brain a small localized nodule, and some smaller particles which resembled tubercular deposit, were found in a spot somewhat to the left of the corpus striatum of that side. Ventricles normal, containing only a small quantity of clear serum, and presenting no evidences of distension from effusion. The fornix was in a state of extreme softening, and the sides of the third ventricle seemed to be also similarly affected.

Thorax.—Left Pleural Cavity contained 40 ounces of greenish-yellow, clear serum. *Left Lung* compressed; weight, 28 ounces; Upper lobe contained some air and crepitated, but the lower was completely carnified and airless. Great thickening of the pleura over the whole surface. A few small scattered tubercles at the extreme apex but not elsewhere. *Right Lung* weighed 32 ounces. The opposed surfaces of the pleura over it nearly universally adherent—the same, also between the lobes. The upper lobe presented, on section, infiltration of its structure, with numerous cavities, varying in size from very small ones to about the size of an almond, all containing pus. The middle lobe showed numerous small tubercular deposits, with surrounding infiltration but no excavation; whilst the lower lobe contained no tubercle, and was crepitant throughout, but much congested.

Heart dislocated somewhat to the right. All the valves healthy.

Liver and Kidneys healthy. On examining the larynx two considerable ulcers were found at the base of the epiglottis, but none in the cavity of the larynx proper. A section was subsequently made of the left temporal bone, when it was found that there was no caries of the bony structures of the internal ear, and consequently the otorrhœa must have been unconnected with osseous disease.

Remarks.—Thus we find this young man had suffered from earache in the month of June last, which soon disappeared, not to return again until the beginning of November. After a short time this apparently increased in severity, and was accompanied by a purulent otorrhœa: then the pain was described by the patient himself as extending or radiating from the ear until it occupied the entire side of the head, and at last became exceedingly excruciating. Co-incident with and following upon this apparent extension and increase of aural pain, came the cerebral symptoms, heaviness, great drowsiness, gradual paralysis and hemiplegia of the opposite side, coma and death. On the first occurrence of the head-symptoms the question naturally arose: "What is the *origin* of the evident brain-lesion?" We had, apparently, two possible sources from which a meningeal inflammation might have originated, viz.: inflammation of the ear and tubercular affection of the right lung. Inflammations in different parts of the brain are well known to be apt to follow purulent discharges from the ear. Tubercular inflammation of the brain, with varying symptoms, is also known not unfrequently to accompany and terminate tubercular disease of other organs, especially of the lungs, and the question I asked myself was: "Which was it in this case?" From the autopsy you will have perceived that we then discovered that the meningitis had really been of tubercular origin, but I must confess that though during life this question was mooted and discussed, still the symptoms were of such a peculiar character that I did not feel warranted in making a *positive* diagnosis between tuberculization of the brain and inflammation arising from the purulent otorrhœa; so that it was only by post-mortem examination that the actual nature of the cerebral disorder was ascertained with certainty. At the commencement the patient himself always referred his suffering to the ear alone, and subsequently seemed to feel as though the pain radiated from this as from a centre; then the doubtless accidental circumstance that the inflammatory action was confined principally to the hemisphere of the brain corresponding with that upon which the otorrhœa was seated, thus producing the final hemiplegia upon the *opposite* side, all tended to give rise to the appearance of the *probability* of the *extension* of the diseased action from the ear itself, which, however, was ultimately proved to be opposed to the actual fact.

Case of Mismanaged Shoulder Presentation in which Decapitation was Practised—Death from General Uterine Inflammation on the Fourth Day after Delivery. By THOMAS SIMPSON, M.D., Montreal.

(Read before the Medico-Chirurgical Society.)

MR. PRESIDENT AND GENTLEMEN: When our President kindly suggested at our last meeting that I, among others, should furnish a paper on this occasion, he expressed a desire to hear something of practice in the far West, where I have resided for several years. I have selected a case of midwifery as illustrating an uncommon phase of practice in that department of medicine.

On the 26th June, 1871, I was called to see a poor woman, Mrs. C. T., aged 46, in labour with her eleventh child. She had been ill with severe pains for twenty-six hours, and had been in charge of the village midwife, a woman of large experience but extremely ignorant. I found the patient lying on her back across the bed, her hips resting on the edge, and her legs flexed and supported by two chairs; her pulse was small and rapid; skin pale; countenance anxious and expressive of suffering and exhaustion; there was no delirium and but little restlessness: she frequently made a faint effort to vomit. On making an examination the external genitals were found swollen and contused, and with the abdomen intolerant of pressure or manual examination. The vagina was dry, hot and tumid. It will be seen that these alarming symptoms did not result from the prolonged efforts of nature to expel the child, but from these with the rough usage and ill-directed force exerted by the midwife superadded.

Both hands of the child were protruding. The midwife informed me that she had been pulling and tugging at these for hours, until she became completely exhausted and was obliged to send for my assistance. The arms bore evidence to the truth of this statement. Both hands lost all elasticity, appeared to be separated to some extent from the scapula, and the right humerus was fractured at its middle. The child lay across the pelvis; the shoulders were forced into the brim and the head was flexed backwards till the occiput rested between the scapulæ. The uterus, in a state of continuous contraction, embraced the child. The state of the patient urgently called for immediate delivery. The child, in all probability, had ceased to live. I came to the conclusion, after a careful examination, that version was impossible. The shoulders of the child were firmly wedged into the brim and the uterus contracted and moulded to its form. At any rate I decided in my own mind (any skilled assistance or advice was beyond my reach) that if a prolonged attempt to turn failed, the patient would die

in my hands undelivered. There was not time for more than one operation. The question was evisceration or decapitation? I chose the latter. The pelvis was roomy and the position of the child favourable. I had little trouble in passing the blunt hook over the child's neck, which was drawn down as far as possible and steadied by an assistant, then snipped through, little by little, by means of a strong scissors. The delivery was rapidly effected, the head came away without delay, and the placenta speedily followed.

I am sorry to be obliged to relate a fatal termination in this case. I remained with the woman for several hours, and left her in tolerable comfort and very hopeful. Owing to other engagements and distance I saw her only once after—on the third day. She was then rapidly sinking from violent inflammation of the whole uterine system. The vagina had been discharging and continued to discharge large quantities of pus. She died on the fourth day.

There has been a great deal of difference of opinion as to the relative merits of decapitation and evisceration in these cases. British practitioners were, as a general rule, averse to the former and older operation; the chief objection being that after the delivery of the body the extraction of the head was often attended with considerable difficulty and delay. Of late years, however, decapitation has come into favour, and is practised by some of the leading accoucheurs in Europe. Sir James Simpson considers it a safer operation than evisceration, and easier of performance. It must be remembered in favour of evisceration that we throughout maintain a certain control over the head, and are able to exert considerable extraction force by means of the attached body, and if further instrumental assistance be necessary, the crotchet, or perforator, or forceps may be more readily and expeditiously used.

Montreal, March 7th, 1873.

TO CORRESPONDENTS.

W. H., Niagara.—The last number of this journal (for March) contained an article headed "Bill—An Act to Amend the Ontario Medical Act," in which the editor gave his opinion freely on that measure.

A. D. W., Dickinson's Landing, Ont.—Your letter received. The March number of the journal was sent to your address early last month.

Hospital Reports.

Medical and Surgical Cases Occurring in the Practice of the Montreal General Hospital.

Medical Cases occurring in the Montreal General Hospital, under the charge of George Ross, A.M., M.D.; Physician to the Hospital, and Professor of Clinical Medicine, McGill University:

Case of Periodic Supraorbital Neuralgia—No History of Ague—Quinine—Rapid Relief. Reported by Mr. R. W. Bell.

J. C., aged 25, a native of Ireland, shoemaker by trade, was admitted to the Montreal General Hospital, February 18th, 1873. Is a tall, thin man and appears rather nervous. He complained, at the time of admission, of a severe neuralgic pain in the forehead, especially over the right eyebrow. The pain was decidedly periodical in character, the paroxysm commencing about 8 a.m. daily, and reaching its maximum intensity by noon, then declining till about 3 p.m., when all pain was gone. On exerting pressure over the supraorbital foramen, at any time, he winced considerably with the pain. He has suffered so much with it for the past twelve days that he could not work, and it has been so severe as to produce considerable lachrymation. He had a similar attack about twenty months ago which lasted about three months. The present seizure began three days after his arrival here from Ireland, but as he had a good passage out, and no cold winds, &c., that did not seem to account for it. He was in hospital, at that time, for one week, and attended as an "out-door" patient for a month afterwards. He also suffered then for two months with severe diarrhœa. He was completely cured, at that time, and has been perfectly free from pain till the present attack. He complains of his appetite having been very bad since his arrival in Canada. Nothing can be discovered to account for his present neuralgia in such regular paroxysms, as he has not had any periodical fever, nor has he lived in a malarial district, but he has been working at his trade lately from 7 a.m. to 9 p.m., and thus suffered much fatigue, which probably aided in the production of the attack. He was ordered: ℞ Quin. Sulph., grs. xxiv.; Acid. Sulphur Dil., q.s.; Aq. ad., ℥vj. Two tablespoonfuls to be taken at 7 a.m., and one tablespoonful at 12 noon and 6 p.m.

Feb. 19th.—Pain as usual, but it began rather earlier, so the double dose of quinine has had but little or no effect on it yet.

20th.—Pain very slight to day.

21st.—Paroxysm as usual, and rather severe.

23rd.—Paroxysms yesterday and to-day very slight, with but little pain.

24th.—No return of paroxysm: appetite good. Discharged from hospital. He is to continue the quinine.

March 8th.—He has since been seen, and has been completely free from pain, which shows the marked influence of quinine over supraorbital neuralgia of a *periodical* nature, though unconnected with antecedent ague.

Obstinate Intercostal Neuralgia of Three Years' Standing, following a Severe Attack of Herpes Zoster—Cured by Hypodermic Injections. Reported by Mr. J. C. Cameron.

A. F., aged 70, married, was admitted into the Montreal General Hospital on the 26th September, 1872, suffering from severe paroxysmal pain in the left side. She states that *three years ago* last March she was suddenly seized with severe shooting pains in the left side, followed, in two or three days, by the appearance of many small blisters, looking, as she says, "as if it had been *burnt*." The part thus affected subsequently remained ulcerated and sore for a length of time, but finally healed, but the pain which had accompanied it throughout remained, and, indeed, she has never been entirely free from pain in the part since the first commencement of the attack, and latterly this pain has been becoming more severe. The pain is now evidently neuralgic, occurring in violent paroxysms, and following apparently the course of the seventh and eighth intercostal nerves. It is darting and stabbing in its character, and the usual anterior, posterior, and mid-lateral *tender points* are extremely well marked. There are to be seen, surrounding the left half of the chest, just below the mammary gland, a series of cicatricial patches, varying in size from half the palm of one's hand to that of a quarter dollar, white and glistening in appearance, and which at first were naturally taken for the scar of a burn, until the previous history just related was known and it was found that the cicatrices extended exactly from the sternum to the vertebræ round one side of the body.

Ordered Cod Liver Oil, and to have a hypodermic injection of gr. $\frac{1}{4}$ Morph. Mur. every night.

It is unnecessary to give a detailed report of this case. Relief to the pain was immediate: the tenderness of the "points" soon

became much less, and she slept soundly at last without the morphia. Discharged cured, for the time at any rate, on the 28th October, 1872, after just one month's treatment.

This case is an example of the extreme severity of some of the neuralgias which are found to be accompanied by Herpes Zoster; also, of the extent to which the latter may lead to ulcerative destruction of the skin, and the obstinacy and persistence of the subsequent painful affection. It was remarked by Dr. Ross that this was the most severe case of the kind he had ever seen.

Cervico-Brachial Neuralgia of Long Standing—Successfully Treated with Hypodermic Injections. Reported by Mr. D. O'Brien.

H. E., aged 23, native of Canada, was admitted into the Montreal General Hospital on the 6th of January, complaining of pain in the left shoulder and down the arm, from which she had suffered for some time, and which had quite incapacitated her for work. She is a married woman and has two children, both dead; her mother died of dropsy; father still living. Previous to marriage her general health had been good and she menstruated regularly. Five years ago she had measles, and shortly after recovering from it she caught scarlet fever. Four years and a half ago she had intermittent fever, while residing in western Canada, and it was a year before she was entirely free from it. She is a delicate looking woman, rather pale, and with an anxious expression, as if suffering pain; appetite not very good; tongue coated; bowels rather confined. A year and a half ago, shortly after her first confinement, which was easy, while nursing, she first felt pain in the shoulder and about the end of the shoulder-blade. The pain, which was very severe, and sharp and shooting in character, generally became worse in the afternoons and towards evening. From the shoulder the pain passed, darting down the arm as far as the wrist. She consulted a medical man, who prescribed for her, and in the course of three weeks she was relieved, but only for a short time, after which it again returned, and since then she has never been entirely free from it, there being constantly pain in the part, excerbated in paroxysms to an intense degree. She had been very subject to headache, attended with nausea, and, at times, vomiting. She had some flooding after her last confinement, which was about eight months ago. For two weeks before admission she could not use her arm at all, nor bear to have it stirred, on account of the pain. She is left-handed, and sews with that hand.

On examination several distinct points of tenderness on pres-

sure were made out, as follows: Over the left side of the sixth and seventh cervical vertebræ, at the inferior angle of the scapula and point of the acromion, outside the tendon of the biceps at the elbow, at the upper third of the radius and the lower extremity of the ulna. There was also a sensation of numbness and actually partial anæsthesia of the integument covering the infraspinous fossa.

She was put on milk diet, with beef-tea, and was ordered hypodermic injections of 1-6 gr. morphia twice a day.

Jan. 8th.—Ordered a dose of oil, as her bowels had not been open for some days.

Jan. 9th.—She complains of pain in the stomach, and has nausea and vomiting. She was ordered the following: ℞ Sod. Bicarb, gr. x.; Pulv. Rhei, gr. iii.; Pulv. Zingib, gr. j.; ter die.

Jan. 10th.—The pain in the shoulder is decidedly better, and the stomach is getting into quite good order.

Jan, 11th.—Almost free from pain to-day; appetite better. Says she has not been so free from pain since it first came on.

Jan. 12th.—Feels as if she could sit up. Ordered a mutton-chop and half diet.

Jan. 14th.—To-day the following prescription was ordered: ℞ Ferri Ammon. Cit., ʒi.; Tinct. Aurant, ʒvi.; Syrup Aurant, ℥i.; Aquæ ad., ℥vi.; Sig. A tablespoonful three times a day.

Jan. 20th.—Complains again of some headache and disorder of stomach to-day, and was given Pulv. Rhei Co., ʒi., and she also had slight sore throat, for which alum gargle was prescribed.

Jan. 21st.—Black draught. The pains in the shoulder and arm are much better; most of the pain is down near the elbow.

Jan. 24th.—On account of the habitual constipation from which she suffered, and the frequent headache, she was ordered the following pill, to be taken three times a day: ℞ Ferri Sulph., gr. ¼; Pil. Rhei Co., gr. ii.; Ext. Taraxaci, gr. ii. M.

As she was complaining of rather more pain in the shoulder to-day, a blister, 2x3, was ordered to be placed over the situation of supra-spinous fossa.

Jan. 28th.—The mixture containing the Ammonio-Citrate of Iron was stopped, and the following substituted: ℞ Quinæ Disulph., gr. xviii.; Spts. Chloroform, ʒii.; Syrup and Aquæ ad., ℥vj. Sig. A tablespoonful three times a day.

Jan. 30th.—Her head has been troubling her very much lately, especially in the afternoon and towards evening. The headache was sometimes just over the crown of the head; sometimes in front, and, again, in the occipital region. In spite of the pills which were ordered the bowels remain very sluggish. In addition

to her quinine she was ordered: ℞ Spts. Ammon. Co., ʒiv.; Syr. and Aquæ ad., ʒvi. A tablespoonful occasionally.

Feb. 1st.—She can now use her arm, and can sew. The arm pain may be said to be gone, and when free from headache she feels remarkably well.

Feb. 7th.—Ordered Chloroform and Aconite liniment for the head, to be used when required.

Feb. 10th.—Has been having two injections daily of 1-6th grain Morphia from the commencement, but is to be only allowed one injection of gr. 1-12 per diem from this date, the arm has so much improved.

Feb. 20th.—The injections were stopped to-day.

Feb. 22nd.—Remains free from pain in spite of discontinuance of injections. Being desirous of going home, the arm was carefully examined to-day. She can move it freely in all directions without pain, and the tender points, which were so well marked at the outset, can be pressed on without causing her any pain whatever. Her general condition is immensely improved. She has lost the careworn expression of a pain-suffering person, and instead seems cheerful and encouraged. She has also gained considerably both in colour and in flesh. Being still troubled with headaches, she was recommended to continue the use of quinine mixture and laxative pill.

Severe Brachial, with Slight Sciatic Neuralgia—Treated by Hypodermic Injections. Reported by Mr. James McLeod.

I. R., carpenter, aged 32, native of England, was admitted into the Montreal General Hospital on the 3rd February, 1872, with severe pain in left arm and right thigh, from which he had suffered since last July, and which had prevented his working. He is a well made man, good complexion, and has been much stouter than he is now. He says he has lost twenty-five pounds since the commencement of his illness. Up to his arrival in the country, which was not very long ago, he had always enjoyed good health. He is a married man and of regular habits, but is much depressed, owing to his continued inability to work and the consequent suffering entailed upon his family. The pain in the thigh, from which he has suffered since July last, he attributes to cold resulting from check of perspiration. It is of a sharp, stabbing character, and comes on in paroxysms, and is followed by a feeling of numbness. Its seat is over the sciatic nerve, though it does not extend to any distance along the course of the nerve. The pain in the shoulder is the more severe of the two and comes on at intervals of about 20 minutes, lasts very sharply for a short time, and

is followed by numbness. It is pretty much confined to the neighbourhood of the shoulder. There was marked tenderness on pressure over the situation of the circumflex nerve, principally at the sides of the insertion of the Deltoid. Not much tenderness over the sciatic. The pains have prevented his sleeping at night; his appetite has failed to some extent, and he has been quite unfit for work. For some time before his admission he had been attending as an "out-door" patient, but had not received much benefit from the remedies prescribed. Tongue pretty clean; bowels not very regular.

Ordered an injection of 1-6th grain of morphia twice a day, and full diet.

Feb. 6th.—The pain is much relieved by the injection. Says he slept better last night than he has done for some time past. He perspires very freely after each injection.

Feb. 7th.—Ordered a blister round the arm at the seat of tenderness, and the following prescription: ℞ Quin. Sulph., gr. xii.; Tinct. Aurantii, ʒvj.; Aquæ ad.., ℥vj. Sig. A tablespoonful three times a day. Also, Pil. Rhei Co. No. iii.

Feb. 9th.—Has considerable pain in the arm this evening, in spite of the blister.

Feb. 10th.—Complains most of the pain in the hip this morning.

Feb. 13th.—A small circular patch of herpes, about the size of a twenty-five cent piece, was noticed over the buttock to-day, near the sciatic nerve.

Feb. 15th.—To-day the patch of herpes presented a very characteristic appearance—a number of vesicles containing an opaque, opalescent fluid being grouped together on a reddish ground.

Feb. 16th.—To-day the vesicles are drying up.

Feb. 20th.—Pain very much better in both arm and leg; his appetite has improved, tongue clean, and bowels regular. He was allowed to get up.

Feb. 24th.—Has had no pain since; moves both limbs freely and without any soreness. He felt so well that he insisted upon going back to work, and was accordingly discharged.

Recent Sciatica—Rapid Cure by Hypodermic Injections. Reported by Mr. S. R. Ellison.

T. McD., aged 47, engraver, native of Scotland, was admitted into the Montreal General Hospital on the 8th January, 1873, suffering from severe pain in the right hip, running down the back of the leg to the foot, and causing a feeling of numbness in the foot. He has been a soldier in the 78th Regiment, and of very

intemperate habits. He is well built and muscular, and his general health has hitherto been good. He has never been in the habit of wearing any flannels in winter since he came to this country. A week ago last Saturday he felt a tickling sensation in the calf of the right leg, like the pricking of pins. This continued throughout the week, and on Saturday he was seized with severe pain in the hip, running down the back of the leg, and followed by numbness. On examination, pressure over the right sciatic nerve showed great tenderness in that situation; in fact he cried out with pain.

He was put on full diet and ordered a hypodermic injection of 1-6th grain of morphia night and morning.

Jan. 10th.—Pain much relieved.

Jan. 14th.—Pain nearly gone from hip, but felt in calf of leg. Ordered a blister 3x3.

Jan. 19th.—Ordered the following prescription: R Tinct. Ferri Mur., ʒii.; Tinct. Nucis Vom., ʒiii.; Aquæ ad., ℥vj. Sig. A tablespoonful three times a day.

He was now allowed only one injection at night. He always feels an inclination to be sick at the stomach immediately after each injection.

Jan. 24th.—With the exception of some pain and tingling in the calf of the leg he is very much better.

Feb. 1st.—To-day he was allowed to get up. He walks with a slight limp.

Feb. 2nd.—The injections were stopped and he was given a liniment to rub the leg. He is beginning to walk better, and has scarcely any pain.

Feb. 15th.—No return of pain. Left the hospital to-day.

Headache, with Nocturnal Excerbations—No Syphilis—Treated with Iodide of Potassium and Hypodermic Morphia. Reported by Mr. J. B. McConnell.

J. S., aged 30, labourer, native of Holland, was admitted into the Montreal General Hospital on the 8th January, suffering from severe pain in the head. He is a stout, plethoric-looking man; short in stature. He has had no illness since childhood. He says he has attacks of bleeding at the nose every winter, as far back as he can remember, until the present winter. For three or four weeks before his admission he had suffered from flying pains in the head. They first began over the left eyebrow, and would fly about the forehead to the back of the head, and *vice versâ*. The pain troubled him in daytime as well as at night, but was always

much aggravated at night. Some years ago he had a chancre, but no history or trace of any secondary disease could be discovered after careful examination. On admission his tongue was somewhat coated; bowels rather confined. He has hardly had a good night's sleep since the pains began, and he sits with his head between his hands as if he was suffering considerably.

He was ordered a purgative and a hypodermic injection of $\frac{1}{4}$ grain morphia night and morning. The pain is generally at its height between 7 and 8 o'clock in the evening.

Jan. 10th.—Tongue now clean; bowels regular. Says he slept better last night than he has done for three weeks. Ordered full diet.

Jan. 12th.—The pain is much better, though it still comes on every night.

Jan. 15th.—Ordered Potass Iodid, gr. x., ter in die, and hypodermic injections stopped.

Jan. 18th.—The pain has entirely disappeared and his expression is now quite bright.

Jan. 20th.—No return of pain; feels quite well and was discharged.

Chronic Pulmonary Consumption—Sudden Death from Hœmoptysis.
Reported by Mr. P. E. Richmond.

G. S., aged 35, a native of England, shopkeeper, formerly soldier in 60th Rifles, was admitted into the Montreal General Hospital on the 7th January with a bad cough. He is a short, thick-set man, dark hair, and has a distressed look. While a soldier was in the habit of indulging pretty freely in spirituous liquors, but up to about two years ago his health was in general good. He states that his father and one brother died of consumption. About two years ago he had some hæmoptysis, but not to an alarming degree. Eighteen months ago he got a severe cough, preceeded by a chill, and accompanied with fever and expectoration of dark-colored matter. With this he went into hospital at Halifax, and when discharged was not perfectly free from cough, which has never since left him. For some time past he has been losing flesh, and has had night sweats, with frequent cough and great shortness of breath. At present his face is not thin; there is, however, very great emaciation of body. The nails are somewhat incurvated, tongue pretty clean, appetite pretty good, and no diarrhœa. He does not sleep well, partly on account of his cough, which is very frequent and accompanied with copious purulent expectoration.

He was placed on milk diet with beef-tea, and ordered a sedative

cough mixture containing Potass. Cyanid, Potass. Nitr., Acet. Scillæ and Tr. Camph. Co.

On examining the chest the following physical signs were made out. Inspection shows flattening of the chest and hollowing beneath the clavicles. The percussion resonance is impaired in both infraclavicular regions, and the whole of the anterior surface of left lung is dull. There is not much difference in the percussion note between the two sides of the chest posteriorly, though the resonance is not quite normal in either. Distinct bronchophony, cavernous respiration, and large gurgling under right clavicle. Bronchophony not so well marked, though present, in left infraclavicular region. Bubbling râles in right mammary region and all over left side anteriorly. Pulse, 100; respirations, 28; temperature, 100°.

Jan. 10th.—Ordered beefsteak. Pulse, 104; temperature, 100 3-5 at mid-day.

Jan. 11th.—Pulse, 108; temperature, 101.

Jan. 16th.—Pulse, 114; temperature, 101. Ordered a draft containing Chloral, gr. xx., every night.

Jan. 20th.—Yesterday he vomited after each meal, and his bowels, to-day, were open three times. Pulse weaker and respiration more frequent. Sleeps after the chloral, but very restlessly, constantly groaning and turning about in bed at night.

Jan. 25th.—At 5 o'clock this morning he told the night nurse to run for the doctor, as he was spitting up a great deal of blood. He sat up in bed when the hæmoptysis came on, and on attempting to get out of bed a gush of blood came up into his mouth and he fell on the floor and expired.

POST-MORTEM ABOUT FORTY-EIGHT HOURS AFTER DEATH.

Rigor mortis well marked. On opening the chest the surfaces of the pleura, on both sides, were glued together and firmly adherent, at several points, to the chest walls. The lungs being removed, the left, which was first examined, was found with both lobes consolidated and airless, and filled with degenerated exudative matter, and presenting several small cavities in the upper lobes. Several of the large bronchi were filled with coagulated blood. The upper lobe of the right lung was also extensively diseased, containing some large cavities and abundant yellow tubercle. The middle and upper part of the lower lobe were also infiltrated. About one-third of the lower lobe was crepitant, much congested and containing scattered tubercle. The other organs, unfortunately, could not be examined.

Threatened Enteritis from Constipation—Incipient Collapse—Speedy Relief by Enemata and Morphia. Reported by Mr. F. J. Shepherd.

M. McK. was admitted into the Montreal General Hospital on the 20th February, 1873, suffering from constipation, pain in bowels and vomiting.

History.—About a week ago began to have a feeling of soreness about his abdomen. Two days after was seized with a severe pain in the bowels, which was accompanied by constant vomiting, great thirst, and constipation. At this time he took a dose of castor oil, which did not operate. Has never had an attack like this before.

State on Admission.—Intense pain in the bowels, vomiting every few minutes; even a mouthful of water is immediately rejected; constant thirst. Abdomen considerably distended and very tender on pressure, and on percussion gives a tympanitic note. Bowels have not been opened for four days. Tongue dry and coated. Extremities livid and covered with cold, clammy perspiration. Pulse small, weak and rapid—106; temperature, 100°.

Treatment.—To have, immediately, a turpentine epithem over the bowels, and an enema of castor oil and turpentine. Was also ordered a powder as follows, to be taken every four hours: ℞ Sodæ Bicarbonat, gr. v.; Morph. Acetat, gr. ¼. Lime-water and milk to drink.

Feb. 21st.—Much better this morning; bowels have been well opened by the enema; has taken six powders, and has only vomited three or four times since yesterday evening; abdomen still tender, distended and tympanitic; tongue still coated, but moist; pulse much stronger and not so rapid—68; temperature, 98.4°. Repeat enema and continue the powders.

Feb. 22nd.—The enema produced one motion; abdomen still distended and tympanitic, but not tender; tongue clean; pulse, 52; temperature normal.

Feb. 23rd.—Free from pain; abdomen not much distended; tongue clean and moist; pulse, 50. Ordered: ℞ Acid Hydrocyanic Dil. gtt, xii.; Sodæ Bicarb, ʒi.; Aquæ ad., ℥vi. M. One tablespoonful every four hours.

Feb. 25th.—Sitting up to day; abdomen flaccid and normal; pulse, 52; slept well last night; no pain; no vomiting.

Feb. 26th.—Left hospital to-day.

Febrile Urticaria—Apparently from Exposure—High Range of Temperature. Reported by Mr. J. C. Cameron.

A. McI., aged 19, messenger, was admitted into the Montreal

General Hospital on the 24th October, 1872, complaining of general *malaise*, feverishness, and slight cough. States that three days ago, whilst watching a horse, he was exposed to a severe wetting for a length of time. The next morning he felt chilly, out of sorts, and lost his appetite. Bled from the nose two or three times.

On admission his pulse was 86; respirations 24 per minute; tongue slightly coated: temperature 102; slight cough, but physical exploration revealed nothing wrong.

On the 28th October a rather profuse rash of urticaria made its appearance on the face, neck, arms and trunk, and was accompanied by the usual intense tingling and itching. It remained out only about an hour, when it entirely disappeared.

Ordered a mixture of Rhubarb and Soda.

The eruption appeared again on the 29th. There was none on the 30th October, 1st, 2nd and 3rd November; but it was again visible on the 4th, 6th, 8th and 9th, in a slight degree, whilst the appetite improved and he felt well. Discharged on the 11th November, 1872:

The following table exhibits, accurately, the daily ranges of the thermometer throughout the attack, which are interesting as showing to what a high point the temperature may reach in this comparatively trivial affection, and how such observations might lead us, as they actually did in this case, to suspect, in the early stages, the onset of some graver complaint:

Proceedings of Societies.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Meeting held 7th March, 1873.

The Society met at the room in University street, R. P. Howard, Esq., M.D., President, in the chair.

After routine business Dr. Ross read an interesting paper on Pleurisy with effusion, ending in Tubercular Meningitis and death. The patient had suffered while in Quebec, in June last, from an attack of severe illness, with stitch in the side and high fever. When admitted into the Montreal General Hospital, in October, the left pleural cavity was found to be filled with fluid; there was, also, dislocation of the heart to the right side and evidence of advancing tubercular disease of right lung with failure of the strength of the patient. He subsequently suffered from pain in the left ear and slight purulent discharge. The pain increased

and seemed to engage the entire side of the head, being worse at night. This continued, the man became steadily worse, profound insensibility followed, accompanied by strabismus and paralysis of right side of the face, and he sank and died. On post-mortem examination tubercle was found in the brain substance and scattered through other organs of the body. (This interesting case will be found in the Original department of this journal.)

Dr. Trenholme remarked that he was not at all satisfied that the deductions drawn in the paper just read were correct. In the first place he thought it most probable that the attack had been one of *pneumonia*, not *pleurisy*, and had terminated in the destruction of of the lung described. Further, the description of the meningitis, he thought, was of a form which might have been produced from the otorrhœa, and, occurring principally on the same side of the brain, he could not look upon it as a coincidence, but as cause and effect. The absence of distinct tubercles on the meninges, he thought, also favoured this view.

Dr. F. W. Campbell said that his attention had been very much directed lately to the subject of tubercular meningitis on account of one or two peculiar cases in his own practice, and it was surprising how much we had to learn upon this important disease. He related one of these cases—that of a child in whom he had diagnosed this affection, and was confirmed in his opinion by a consulting physician. The patient became gradually insensible and remained completely so for many hours, when, strange to relate, his consciousness returned, remained quite clear for between two and three days, when he again relapsed into a comatose condition and died.

Dr. Gardner supplemented this with the account of a patient of his who presented the following history: Two years ago he had been treated for a very severe and persistent headache. When first attended by Dr. G. he was believed to have typhoid fever, but when apparently passing through the latter stages of this disease developed the most marked cerebral symptoms and died comatose after paralysis. Taken in connection with his previous attack, he had come to the conclusion that this patient had really died of tubercular meningitis, but was not permitted a post-mortem by which to verify or negative this opinion.

Dr. Ross said, in reply to the remarks of Dr. Trenholme, that in the first place, as regarded the original thoracic attack, the symptoms given were shortness of breath, with very acute pain in the *left* side; then, on his admission the signs of extensive pleuritic effusion on that side, as detailed, were clear and unmistakeable, whilst on the right side there were no signs of recent pneumonia.

He could not, therefore, see the force of Dr. T's remark, and maintained that the hypothesis in the paper was unquestionably correct. As regarded the character of the brain-lesion he thought the description alone would have sufficed to prove this. Brain-lesions, the result of previous otorrhœa, were usually of three kinds; either purulent inflammation of the dura mater, abscess of the brain, or inflammation and coagulation in some of the cerebral sinuses. None of these were present in this case; but, on the contrary, the dura mater was unaffected, whilst the inflammatory action in the other tunics corresponded in its situation to that which we expect to find in the *tubercular* form of the disease. The presence of actual tubercle was not necessary. Tubercle was present in other organs, the lungs and mesentery, and a small deposit in the substance of the brain. He was, therefore, convinced of its tubercular nature, and thought that this view could not be controverted.

The President observed that having seen the brain and a portion of the intestine and mesentery, and listened to Dr. Ross' account of the case, he could not comprehend how any one familiar with pathology could question the tuberculous nature of the meningitis. Basilar Meningitis with central softening of the cerebral substance, is admitted to prove the tuberculous nature of the meningeal inflammation; and meningeal tubercle in its early stages is, no doubt, often overlooked owing to the circumstance that it is developed in the sheaths of the blood-vessels. The case presents an interesting topic for discussion: Did any connection exist between the otorrhœa and the tuberculous meningitis? Troltsch had stated that purulent otitis not rarely precedes that disease, an observation not of great weight when the frequency of otorrhœa in children is borne in mind. In this instance, too, the inflammatory affection of the chest occurred before the aural disease. As to the great mortality of tuberculous meningitis, Dr. Albutt, in his recent work upon the ophthalmoscope, had ably defended an opinion which he appeared to regard as peculiarly his own, but which had been enunciated years ago by Sir William Jenner, viz., that tuberculous meningitis is not invariably fatal. Dr. Albutt maintains that mild forms of the disease not unfrequently get well; that idiocy is occasionally a consequence of a previous attack of tuberculous meningitis, and that the ophthalmoscope will very frequently in such cases reveal congestion of the optic disk and retinal vessels, which, if combined with the ordinary symptoms of tuberculous meningitis, in his opinion justifies the diagnosis of that affection. If these views prove correct they are the most valuable contribution to the subject made since the disease has been distinguished from the simple form.

Dr. Simpson, late of Bruce Mines, then read an interesting paper on a case of neglected shoulder presentation, in which he was forced to practice decapitation. This paper illustrates more forcibly than words can express the incapacity of women to manage or to be trusted with the management of cases of labour, other than the most simple forms of parturition. (This interesting and instructive paper will be found in our Original department.)

This was followed by a few remarks by some of the members present.

Votes of thanks were then tendered to Dr. Ross and Dr. Simpson for the very interesting and instructing papers just read, after which the Society adjourned.

Correspondence.

LONDON CORRESPONDENCE.

In the early part of the last month we had a regular Canadian snow-storm, a most unusual circumstance at this season of the year. The weather was miserable, the cold penetrating, and the houses comfortless. The cold was not great, as registered by the thermometer, but if guaged by one's own feelings it was considerable. The streets were, during the greater part of two days, almost deserted; here and there a solitary cab might be seen toiling along at a snail's pace. The traffic was almost entirely suspended, but towards evening of the second day the snow had been cleared away from the principal thoroughfares and waggons and carts running much as usual. I never suffered more in Canada from cold than I did during those dreary days, and to add to the discomfort and misery coals advanced eight shillings per ton. Only fancy paying forty and forty-two shillings a ton for coal in London.

There was another excision of the tongue at University Hospital, performed by Mr. Erichsen. The disease, epithelioma, was situated on the left side of the organ, far back. Mr. Erichsen began the operation by an incision through the left cheek, from the angle of the mouth to about opposite the upper molar. After arresting the hæmorrhage by ligating the vessels divided, he passed the wire of the galvanic ecraseur through the middle line, near the base of the tongue. The battery being applied, it was split up from behind forwards to the tip. The wire was again applied at right angles and the diseased mass severed. A considerable portion of the tongue was thus left, and although several

large vessels near the root of the tongue were divided, not a single drop of blood was lost. Mr. Erichsen remarked that the slower the parts were divided by the galvanic ecraseur the better, as it gave time for charring and lessened the danger of secondary hæmorrhage. On the same day Mr. E. removed a fibroid tumour occupying the bursa patella. On cutting into it after its removal some of the melon-seed-shaped particles were found, which are commonly seen in the fluid contained in a chronically enlarged bursa.

On the 1st February I witnessed several operations at King's College Hospital. Mr. Henry Smith ligatured a nævus in a child after the plan recommended by Sir William Fergusson some twenty-five years ago, after which Sir W. Fergusson ligatured two nævi in children on a new plan of his own in which the ligature is wholly subcutaneous. I enclose a diagram which I hope you will understand. He also excised a knee-joint. There was nothing remarkable in this case. He afterwards removed a mammary gland for scirrhus; performed a Syme's amputation at the ankle-joint for disease of eighteen years' standing, and removed the balance of a prepuce after sloughing phagedœna. Mr. Henry Smith showed us a case of excision of the knee-joint in which bony anchylosis had taken place in five weeks.

At the Children's Hospital, Great Ormond street, I saw a case of intra uterine amputation of both arms at the shoulder-joint, in a boy who is now about six years old, and another case of supposed tuberculous ulceration of the bowels in a child. It had suffered from continued and obstinate diarrhœa with great wasting of the body. Nothing seemed to do any good until it was fed with a mixture of brandy, eggs, milk and arrowroot, made up in a mess. Since this had been used the diarrhœa had ceased, the child had improved in health, and was gaining flesh and weight. I was shown, also, an interesting case of general paralysis following chorea. Dr. West said the child was rapidly improving without treatment, and was now able to sit up in bed. How the homœopaths would gloat over such cases if they had been giving them their little pills, and make a great flourish of trumpets at the success of their humbug.

I went to Silvertown recently and visited a sugar refinery, and also an extensive iron works; the latter were very interesting, although I do not know much about it. They were making telegraph wires and submarine cables, among which was the new Franco-American ocean cable. It looks very strong and ought to stand the whack of the tail of the great Leviathan or any other monster who takes his pastime in the ocean. The shore end of

the cable is as thick as your arm. We saw the process of making wire from the puddling upwards. Large balls of iron of dazzling brilliancy, and giving off innumerable scintilations, are taken from the furnaces and wheeled off in barrows to the steam hammer, where they are welded into blocks. The drawing of a bar of iron into wire is a very pretty process. It looks like a long red snake, as it come out through the holes, and is coiled on large reels. After this it is stretched, when it becomes brittle, and requires to be again heated to recover its ductility. It is then washed with sulphuric or muriatic acids, doused well with water, and then galvanized. The proprieter of the works was very civil to us. He was originally a workingman, and recently he refused a million and a quarter pounds sterling for the works. He was walking about and superintending things generally. It was worth a good deal, I thought, to see a live million of money moving about, and still more to have shaken hands with it at parting. How lucky would it have been for me if, by some magic chance, it had stuck to my palm. Stupid-like I forgot to inquire about the young ladies, as there might be *one* at least: however I always was bashful and retiring, as you know.

Convocation is sitting just now, fully occupied with the Athanasian creed. I met an old gentleman at dinner the other evening, and he said that the evening previous he, with a number of members of Convocation, were asked to Dean Stanley's, and that when they got there they found a posse of dissenting ministers of all denominations who had been invited to meet them. This gentleman seemed to enjoy the joke, but said that some of the stiff-starched ones were a good deal disgusted. Dean Stanley is a splendid preacher. I heard him last Sunday at Westminster Abbey. O. still frequents the High Church, but says that he cannot exactly swallow St. Albans when Dr. McConchie officiates.

Odger the great lately sued the *Figaro*, a comic paper here, for libel, but the jury found for the defendants. The plaintiff (Odger) in his examination stated that for the past seventeen or eighteen years his time had been divided between bootmaking and speech-making.

Mr. Christopher Heath excised a tongue at University College Hospital, with the galvanic ecraseur, on the 15th February last. He also removed the olecranon process in the case of a man who had fallen and broken the process off. It was a compound fracture, the broken fragment projecting through the wound.

At University College Hospital they have a very complete arrangement of Turkish Baths, which were erected mainly under the supervision of Dr. Tilbury Fox. They are extensively used in

skin diseases, also in rheumatic and arthritic affections. It would be a good thing for the Montreal General Hospital if the Managing Committee were to erect something similar, and I should think you would find it of great advantage, more especially in skin diseases.

At Guy's Mr. Bryant removed a medullary tumour from the front of the wrist of a boy of about thirteen years. It had been growing for some three or four years, and had infiltrated all the flexor tendons. The same surgeon performed excision of the ankle-joint in a boy aged nine years. This was for disease of the joint following a sprain. In his remarks Mr. Bryant observed that there would be some shortening, as the epiphyses of the lower ends of the tibia and fibula had been removed. The bones of the legs were bent from rickets, but his experience led him to believe that such bones united as readily as did those that had never been diseased. The edges of inner wound were brought together with sutures and carefully covered with compound tincture of benzoin. The outer wound was left open at the lower edge to permit of free discharge. At the same hospital, on the 4th March, Mr. Durham removed a cystic bronchocele from the neck of a woman aged thirty-six years. The tumour, which was large and interfered with her breathing, appeared to engage the isthmus. It was of five years growth, and had resisted treatment. A vertical incision was made through the skin, to the left of the median line. This extended from the hyoid bone to the sternum. A large vein ran down the centre of the tumour. This was ligatured with catgut, both above and at its lower extremity. The fascia was then divided and the tumour laid bare. The dissection was then carried on with the finger and handle of the scalpel, with a few touches of the knife, and the mass readily turned out and removed. It was loosely attached to the trachea, but had some firm fibrous connections, on either side, to the lateral lobes of the thyroid body, which appeared healthy. Very little blood was lost during the operation. The wound was brought together by sutures. The tumour measured some eleven inches in circumference. On the same day Mr. Cooper Foster performed excision of the head of the femur in the case of a boy suffering from advanced disease of the hip. The femur was divided just below the trochanters, and the acetabulum, which was diseased, was treated with the gouge. The head of the femur was quite denuded of cartilage and in a state of caries.

A. A. B.

London, 12th March, 1873.

Reviews and Notices of Books.

The Practice of Surgery. By Thomas Bryant, F.R.C.S., Surgeon to Guy's Hospital. With Five Hundred and Seven Illustrations. Royal 8vo.; pp. 984. Philadelphia: Henry C. Lea. 1873.

A surgical text-book, short, pithy, and yet containing much that is sought after by students and practitioners, appears to us to be a want. The excellent works of Gross and Erichsen have, within the last few years, so enlarged their borders as to come more under the heading of extended treatises, wherein will be found the science as well as the art of surgery. Not that we would have it inferred that Mr. Bryant's book is lacking in either of these particulars. When we look back at our earlier days of student life and remember the compact little works of Druit and Fergusson which held rank as surgical text-books for students, we cannot but feel that the surgical student of to-day possesses advantages that we lacked, and at the same time should, if he makes good use of his time, be better prepared to enter on the earnest duties of the practice of his profession. Custom, if not the requirements of the age, has obliged authors of the present day to elaborate, not to epitomise.

In the introductory remarks the author gives general instructions what symptoms to observe, and how to observe them. He remarks: "The art of surgery, to be successful, must be based on "the science, and the science is, without doubt, based on obser- "vation." He goes on to give general instructions to the surgical student in the method of case-taking, and shows the great, the urgent necessity for obtaining a careful clinical history before attempting a diagnosis. "For example, when the surgeon is "called to see a man who has been picked up in the street, and is "insensible; who is, in fact, in an apoplectic condition, and has, at "the same time, some external evidence of injury to the skull; "he may, perhaps, also smell of spirits, and thus another element "of difficulty has been added." A careful probing as to the nature of such a case is the enly means the surgeon has to save himself from error which in some instances would be fatal to the patient. All points connected with any surgical accident or injury should be carefully noted and unravelled. "Too much time can- "not be bestowed upon the task, for to treat an apoplectic seizure

"or severe brain injury from external violence, for drunkenness, "is a grave error; and it would be well if I could add that it was "never committed."

The author points out the necessity of comparing one side of the body with the other in cases of surgical accident or disease. He remarks that this should be "an invariable rule of practice in "every case of injury or disease"

It becomes a difficult task, no doubt, to select a system of arrangement of the vast domain of surgical subjects, so as to form some kind of connection throughout the work. This difficulty has, apparently been experienced by the author, as there are some subjects which, to our mind, seem to be in the wrong place, still we freely admit that perhaps the author, if appealed to, would give the very best of reasons for having adopted the plan of the work. Mr. Bryant, as a practical surgeon attached to one of the principal hospitals of London, has had ample opportunities for observation, and he has taken every advantage of his position.

His introductory chapter, which is excellent inasmuch as it contains directions to the student as to what to observe in reporting cases, is followed by four chapters on Repair and Inflammation, Traumatic Fever, Septicæmia and Pyæmia, Tetanus and Trismus, and Delirium Tremens. The second portion of the work, if we may so term it, is taken up in the description of surgical subjects, on what may be regarded as a physiological basis. As "Surgery "of the Nervous System," of "The Surgery of the Respiratory "System," of "The Circulatory System," "The Surgery of the "Digestive System." Then follows "Injuries and Diseases of the "Integuments, Cellular Tissue, &c," including a chapter on diseases of the lymphatics and their glands. We next have the surgery of the urinary organs discussed in some eighteen chapters and this department includes venereal diseases and syphilis. The remaining portion of the work is devoted to tumours, dislocations fractures, and diseases of the bones and joints, with their treatment.

There is one feature of Mr. Bryant's work which is especially pleasing, and that is the illustrations. In the preface the author remarks: "If I have drawn largely from the Guy's Museum to "illustrate these pages, it has been because I found all I wanted "within its walls, and possibly my readers will pardon me for "having used my own material in preference to others, if they "find it good." To this we can only say it is of the best. Unlike the generality of illustrated books, in this particular the work before us is unexceptionably excellent, the illustrations being

original and drawn from a collection which have never before appeared in this form.

We notice that in the chapter on ligature of arteries the illustrations give a faithful description of the relations of the vessel to be ligated. In the English edition of the work the vessels are coloured, which renders the subject more intelligible. The directions to be observed are short and concise, but are all that is needed by the busy practitioner. Mr. Bryant is a strong advocate for colotomy in diseases of the rectum, and he mentions cases in which, without doubt, the life and comfort of the patient has been prolonged for months—in some instances for years. In cases of suppuration of the kidney he considers it perfectly justifiable to cut down and give free exit to pus, or to remove a calculus. Such cases are happily exceptional, but it is certain that where evidence of pus exists we can see no reason for refusing to give relief surgically. In fact we have seen in the practice of other surgeons the happy results of such treatment; nor can we conceive why any question of its being justifiable should arise. In speaking of lithotomy, Mr. Bryant prefers the lateral operation, cutting after Aston Key's method, on the straight staff. In speaking of the old Marian method of operation revived by Allarton as his median lithotomy, the author remarks: "Upon the whole, however, "modern experience does not give much support to this oper- "ation. When the stone is small it may be done with safety; but, "when large there must of necessity be too much laceration of "the neck of the bladder and prostate to render the operation "equal to the lateral." And he goes on to remark: "The expe- "rience of the Guy's surgeons is certainly not in favour of this "operation, and that of Norwich in no way tends to give it any "support, the mortality of the median being nearly twice as great "as the lateral operation; indeed it may be stated that as an "operation it is losing ground in the opinion of most surgeons."

With regard to the style, it is not the best; some of the sentences are slightly embarrassed. This is, however, of minor importance when we consider the excellence of the whole work. It is a first effort, and we doubt not that in future editions the author will improve in style, and give to us a work not only from an authority on surgical subjects in Guy's Hospital, but with all the finish of an English *litterateur*. The publisher has done his work with his accustomed excellence of finish. The paper is good, and the type clear and well impressed.

Neuralgia and the Diseases that Resemble it. By FRANCIS E. ANSTIE, M.D. (Lond.), Fellow of the Royal College of Physicians, Honorary Fellow of King's College, London, Senior Assistant-Physician to Westminster Hospital, Lecturer on Medicine in Westminster Hospital School, Physician to the Belgrave Hospital for Children. 8vo.; pp. 362. New York: D. Appleton & Co. 1872. Montreal: Dawson Bros.

In the very first sentence of his preface the author of this work says that he believes "it will not be disputed that there was con-"siderable need for an English treatise dealing rather fully with the "subject of neuralgia," and therefore hopes "that the profession "will be willing to give him a hearing." That there did exist just such a want—that is the want of a work by some able hand to explain and illustrate the real nature and causation of those great sufferings which we call neuralgia, by the light of modern discoveries in physiology and pathology—we fully agree, and can hardly bestow a higher eulogium upon the volume now presented to us by Dr. Anstie than by saying that it exactly fits the hiatus it was intended to supply. It cannot be denied that until very recently far too much laxity was allowed in the use of the word neuralgia, not only in a popular way by physicians to their patients, but, also, too much even in scientific and technical works and writings; not only so, but long ago there crept into the general medical mind the (erroneous) idea of the common and usual connection between neuralgic pains and the pains of gout and rheumatism; but we are gradually coming to see that this is mistake, and one which it is of the utmost practical importance to recognize and avoid, both in speaking of and treating the disease in question. Dr. Anstie is avowedly the great champion of this view. He says: "My prin-"cipal object in writing this volume was to vindicate for neuralgia "that distinct and independent position, which I have long been "convinced it really holds, and to prove that it is not a mere off-"shoot of the gouty or rheumatic diathesis, still less a mere "chance symptom of a score of different and incongruous dis-"eases." How far this position is maintained it must be for the readers of the book themselves to decide, but we can only say that the collection of facts, and the legitimate deductions from them, amply fulfil the object sought to be attained by the author. The demonstration of these two main points is never lost sight of throughout the whole book; the impress of this leading idea shows itself on nearly every page, and the mass of evidence which is brought together in support of it is so wrought up in a masterly way that it fails not to carry great weight and ultimate conviction.

Of course we do not for a moment claim for Dr. Anstie the credit of *originality* in these views, but we are certain that he is the first who has strongly advocated the necessity of considering neuralgia proper as a disease *per se*. Directed, as we thus are, to the *individuality* of neuralgia, we are thus naturally led to consider what are its associates, and what its hereditary tendencies? These interesting features of the disease are in all parts abundantly dwelt upon and illustrated. The true *neurotic* temperament (probably in all cases more or less directly inherited), together with the manifold causes which are apt to work upon and increase the development of this inherent susceptibility of the nervous system, comes in for its full share in the production of those nervous disorders which are the subject of the treatise. The relation of the different neurotic affections, the one to the other, and the differences between them, afford us some of the most absorbing and, at the same time, most avowedly difficult problems in the whole range of medical science. The clear and logical mind of our author shines most conspicuously when attempting the solution of some of these questions, and whilst never letting go the main idea, as just explained, he is often led to remarks on these kindred affections which show the keen observer and astute logician (we mean one who can appreciate *differences*, not *resemblances* only), and where space does not permit of amplification he always succeeds in furnishing abundant material for independent thought and research.

This volume is divided into two parts, together with an introduction on pain in general. Part I. contains five chapters, devoted respectively to the following, viz.: Clinical History, Complications, Pathology and Etiology, Diagnosis and Prognosis, and Treatment of Neuralgia. Part II. is devoted to the diseases that resemble neuralgia, and consists of eleven chapters, viz.: Myalgia, Spinal Irritation, the Pains of Hypochondriasis, of Locomotor Ataxy, of Cerebral Abscess, of Alcoholism, of Syphilis, of Sub-Acute and Chronic Rheumatism, of Latent Gout, Colic and other Pains of Peripheral Irritation, and, lastly, Dyspeptic Headache.

In discussing the Clinical History of Neuralgia, special stress is laid upon the presence of *debility* as necessary for the development of any form of this affection—debility, shown either by the generally reduced condition of the patient from any cause, or, at any rate, debility of the nervous system, and care is taken to explain how the latter may truly exist, whilst at the same time the person may present all the external appearances of being in the enjoyment of the most robust health. This is a point on which we are quite on the side of the author, although high authorities have spoken against its correctness.

The Neuralgias of Intra-Nervous origin are subdivided as follows :

1. Neuralgias of malarious origin.
2. " of the period of bodily development.
3. " of the middle period of life.
4. " of the period of bodily decay.
5. " associated with anæmia and mal-nutrition.

This division, based mainly upon the (true *physiological* not *actual*) age of the patient, is, probably, the best that could be framed. It directs us to the fact of the general resemblances of the different forms of neuralgia which are apt to occur at various periods of life, which, from the fact of the very different *causations* of the different groups, is of the greatest possible prognostic and therapeutic value.

Amongst the many *complications* treated of, one of the most interesting is Herpes Zoster, which is considered, rightly we think, as one of the "inflammatory complications of neuralgia"—not a special disease of itself. As is remarked in this connection, the proof is overwhelming of the correctness of this view. A very remarkable example of its occurrence in a highly neurotic patient has very recently come under our own observation, and we should like to mention it.

A gentleman consulted us for an attack of sciatica a few weeks ago, and from which he is now commencing to convalesce. He was an extremely intelligent person and gave the following history, showing how, during his whole life, he had suffered from evident derangement of some part of his nervous system. In boyhood he had for years been subject to most frightful attacks of sick headache, of the true "migraine" type. Subsequently he had repeated and severe seizures of frontal and facial neuralgia. About five months ago he had a sharp attack of Zoster, and finally he was incapacitated by the sciatica to which we have alluded.

The treatment is divided into four branches: (1) Constitutional Remedies, (2) Narcotic-Stimulant Remedies, (3) Local Applications, (4) Prophylaxis.

As regards the first, it is recommended to *feed* neuralgics, and by this is meant not merely that "by increasing any one element "of food we should seek to enrich the diet, but rather that by "such a steady and persistent effort as Dr. Blandford describes, to "increase the total quantity of nutriment to, perhaps, as much as "one third more than the patient would probably have taken in "health," and to those who from prejudice are incredulous of the propriety of this method the author would say, "Try it, and I "venture to say your incredulity will disappear." Of medicinal

agents, hypodermic morphia is that, of course, which is most to be praised and trusted to, and the virtues of cod liver oil are also highly spoken of. Locally, judicious blistering is that which is most especially recommended.

We need not further expatiate upon this book. Part II. contains a series of chapters devoted to the diagnostic points to be observed as distinguishing neuralgia from a variety of other peculiar affections. It is replete with information and interest—as much, if not more so, than the preceding section, of which we have spoken at greater length.

No practitioner or practical man wishing to thoroughly understand the modern views of the causation of neuralgia, with its diagnosis and treatment, can afford to be without this work of Dr. Anstie. Although familiar with the author's article in "Reynold's Practice of Medicine," which forms the basis of the present treatise, yet we find so much new material added to it that it has all the freshness of an entirely new production.

It is well and clearly printed, and in that respect is a credit to the publishers.

Obstetric Aphorisms for the Use of Students Commencing Midwifery Practice. By Joseph Griffiths Swayne, M.D., Physician Accoucheur to the Bristol General Hospital, and Lecturer on Obstetric Medicine at the Bristol Medical School. Second American from the Fifth Revised English edition, with additions by Edward R. Hutchins, M.D. 8vo.; pp. 189. Philadelphia: Henry C. Lea. 1873.

This little work is written specially for the young practitioner and advanced student, the object of the author being to throw together short practical hints which will be found of use in the management of an ordinary case of labour, and also to point out, in difficult or dangerous cases, when and how the practitioner should act on his own responsibility, and in what cases he should send for assistance. It will be observed that the student or junior practitioner is advised to send for assistance whenever it is deemed necessary to use instruments or introduce the hand into the uterus, and, indeed, in any case of difficulty or danger. The diagnosis in the subjects discussed is sufficiently explicit, the treatment to be adopted is concise, and given in as few words as possible, consistent with clearness. A fuller description would cause the book to exceed the limits prescribed by the author. This advice is excellent in its way, but in our country medical practitioners will sometimes find themselves in localities where a consultation is

an impossibility. In consequence of being at such a distance from professional aid, before it could be procured an ordinary case of labour would be terminated, and in difficult cases the patient might die before the doctor could get the advice and assistance of a brother practitioner.

The author has in this edition made several important additions to the work, such as remarks on secondary hæmorrhage after delivery, thetreatment of perineal lacerations, the pathology and treatment of pelvic cellulitis, the use of hydrate of chloral in the insomnia which is sometimes observed after delivery, convulsions and other puerperal affections. The work is illustrated by sixteen plates, which are original if we except four taken from other sources but duly accredited.

This little book consists of four parts. Part I. is devoted to the subject of the management of ordinary labour. Part II to the consideration of cases which a student may undertake without seeking assistance. In Part III. the student is informed of cases in which he ought to send for assistance, and Part IV. is devoted to some of the diseases of the pregnant state.

We notice at page 173 a chapter headed abortions, in which the writer, in a style which savours of the sensational, draws a picture of the abominable depravity of the age, and of the fact that "scarcely a tyro enters upon his work in the field of medicine ere "he is asked to produce abortion." The writer continues: "Husbands seek it for their wives, libertines ask it for their mistresses, "seducers seek it for the unhappy victims of their licentious "passion, wives—aye mothers even—beg it for themselves." Now, to be practical, we think that in all this the profession is alone to blame. If every man who wrote books suggestive of evil was indicted under a special act for the suppression of immoral publications, and every person who dared to make such a proposal to the mere tyro felt certain that he or she would become acquainted with the inside of a prison. And, again, if every case of abortion purposely induced were followed by trial and execution for murder the thing would cease; the husband would not be such fool as to risk his neck, nor would the libertine, nor the wife or mother. What would be thought of the moral reformer who wrote sensational accounts of murder, and tried in any way to extenuate or paliate that crime? The men tyro referred to, or the man commencing his career as a physician, is unworthy of the confidence reposed in him as a man of honour by his College if he in any way assents to such a proposal, and if he practices as an abortionist it will end in ruined reputation.

We have no sympathy with this style of literature. It can do no

good, but is suggestive of an immensity of evil. Apply the remedy, legislate against the crime, and punish without scruple the criminal. We regret to see this chapter introduced, and while recommending the work to our younger brethren as a safe guide, we would advise the author of this chapter to change the style from its present form or leave it out altogether.

Fistula, Hæmorrhoids, Painful Ulcer, Stricture, Prolapsus, and other Diseases of the Rectum; their Diagnosis and Treatment. By William Allingham, Fellow of the Royal College of Surgeons of England; Surgeon to St. Mark's Hospital for Fistula, &c.; Late Surgeon to the Great Northern Hospital. Second edition, Revised and Enlarged. 8vo.; pp. 265. Philadelphia: Lindsay & Blakiston. 1873.

The necessity of becoming acquainted with the anatomy of the rectum before attempting to treat diseases of that portion of the intestinal track is fully admitted. The same may be said with regard to any other organ of the body, as a knowledge of the anatomical construction of any portion of the body is the key to its pathology, and points to special benefit which will accrue from medical or surgical interference. The benefit resulting from Quain's researches into the anatomy of the terminal portion of the rectum has been manifest, inasmuch as it formed the basis of a scientific method of treatment of this class of diseases. It is necessary to know that hæmorrhoids are nothing more than inflamed and, it may be, hypertrophied portions of the mucous membrane of the lower part of the rectum. These are fed by the vertical parallel arteries of Quain, which constitute an element of danger in the treatment, surgically, of hæmorrhoids. Fatal hæmorrhage has occured from simply snipping off, without ligature, these insignificant-looking protuberances. The vessels which supply these masses are enlarged, and will bleed more freely in consequence of being over-distended and of having lost, in some measure, their elasticity. But, in considering the anatomy of the rectum, it is not alone the arrangement of the arteries we have to deal with; the hæmorrhoidal veins, with their looped submucous plexuses; the nerve with which the sphincter is supplied; and, also, the muscle itself; all have to be considered, because they all bear a prominent part in the many forms of rectal disease.

It has been stated, and with some shadow of truth, that the rectum is more frequently the seat of diseased action than any other organ of the body. This is, at least, observed among civil-

ized communities. It is stated that natives of barbarous countries never suffer from disease of the rectum, and Mr. Allingham, on his own observation, says it is not often met with among the natives of South Africa when in a state of nature. These diseases appear to follow or accompany sedentary occupations, neglect of cleanliness, and the use of improper articles of food. From Mr. Allingham's analysis of four thousand consecutive cases which he examined at St. Mark's Hospital it would appear that there were twelve hundred and eight cases of fistula to nine hundred and sixty-five cases of hœmorrhoids. This, at first sight, is a striking circumstance, but one which can be accounted for on the hypothesis that many persons suffer from hæmorrhoids uncomplainingly, and do not seek for medical advice until what was a simple affection has run on, through neglect, to one of a more serious nature.

The author points out the necessity for careful examination of the parts both with the finger and eye. Speaking on this subject, he remarks: "To prescribe for patients suffering from rectal "maladies, without examining them both ocularly and digitally, is "not only false delicacy but radically wrong, and likely to bring the treatment of such diseases into contempt." It is too often the case that practitioners take for granted the statements of their patients, and prescribe for what is supposed to be an attack of piles, but which would be found to be disease of a totally different nature if a careful analysis of the case was made.

The work consists of seventeen chapters. After a few introductory remarks and an analysis of four thousand consecutive cases, the author proceeds to the consideration of Fistula in Ano, the varieties of that affection, and method of treatment. Mr. Allingham differs in the opinion expressed by most surgical writers, that it is improper to interfere, surgically, in fistula associated with phthisis. That is, he states, in cases of fistula where there co-exists lung disease, confirmed and advancing, an operation would be a positive cruelty and would hasten his inevitable fate. He says: "For my own part, I do not think we have many, if "any, clinical facts tending to show that the operation for fistula "in phthisical patients renders the lung affection worse, or makes "it more rapidly progressive. In saying this I must not be under-"stood to advocate wholesale, indiscriminate operations upon "tuberculous patients; but I mean that if care be taken in the "selection of the proper cases, avoiding interference, if possible, "with *rapidly advancing* phthisis, and the operation to be per-"formed discreetly at the right time of the year, and with favor-"able surroundings, the patients will generally do well, and be

"benefited and not damaged by the cure of their rectal malady." The author reports several cases of undoubted phthisis upon whom he had operated, and relieved of their rectal malady, to the evident improvement of their general health.

Four chapters are devoted to the subject of hæmorrhoids, the varieties met with, complications with other maladies, and their treatment. Chapters eight and nine are devoted to fissure of the rectum and rectal polypi. Ulceration and stricture of the rectum is next considered. In speaking of the more advanced stages of ulceration and stricture, where there co-exist several fistulæ, "the "whole rectum disorganized, as it frequently is, nothing short of "lumbar colotomy offers to the patient any chance of life:" and, he adds, "my experience is that these are really the cases in "which colotomy is especially to be recommended. I have now "three patients alive who were operated upon years ago." He states that the operation is not merely palliative but curative. From the cases which he has had under observation, in which the operation was performed, the rectum has in a great measure returned to a healthy condition. When no fæces are permitted to pass through a diseased rectum ulcers will heal, stricture can be dilated, and occasionally fistulæ will close spontaneously. The question of closing the opening in the loin is next discussed, and the author relates a case of a hospital patient whose rectum had become fairly sound after lumbar colotomy, and upon whom he performed an operation with a view of closing the opening in the loin, but did not altogether succeed; nevertheless he is hopeful of success in other similar cases should occasion present. In speaking of lumbar colotomy in malignant disease of the rectum, the author remarks: "I will not say that life can always be mate-"rially prolonged by the operation, but I am confident that the "suffering of the patient will be much mitigated. I do not "recommend colotomy in malignant disease so strongly as I do "in ulceration and stricture, but I have performed it now sixteen "times for the relief of cancer, and I cannot say that I ever "regretted operating." The author next proceeds to describe the method of operating known as Amussat's modification of Callisen's operation. He says, in reference to Amussat's description of this method: "It is by no means certain, however, that he "ever performed the operation." On the other hand we have the evidence of Mr. Erichsen who, in speaking on the same subject in the last edition of his work on the science and art of surgery, observes in reference to Amussat: "He soon had an "opportunity of putting this opinion to the test of experi-"ment in 1839, in a private case at which he kindly invited me,

"then a student in Paris, to be present." This is sufficient evidence on this head, and should allay all doubt on the question referred to above. Very specific directions are given for performing the operation, the author preferring the oblique incision, as recommended by Mr. Bryant, downwards from the last rib towards the anterior superior spinous process of the ilium.

We have perused this little work with much interest, and, we trust, with some profit. The descriptions are plain and the language clear; nor do we observe what the author modestly refers to in his preface as tautological or inelegant. We commend the work for its practical bearing, freely admitting that the author has conferred a boon upon his professional brethren by affording them an opportunity of perusing for themselves the results of the experience he has obtained from the position he occupies, and of which he has taken every advantage.

BOOKS RECEIVED FOR REVIEW.

The Science and Art of Surgery; being a Treatise on Surgical Injuries, Diseases and Operations. By JOHN ERIC ERICHSEN, Senior Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. A new edition, enlarged and carefully revised by the author. Illustrated by upwards of seven hundred engravings on wood. Vol. I. pp. 781; Vol. II. pp. 918. Philadelphia: Henry C. Lea. 1873.

Manual of Chemical Analysis as Applied to the Examination of Medicinal Chemicals; a Guide for the Determination of their Identity and Quality, and for the Detection of Impurities and Adulterations. For the use of Pharmaceutists, Physicians, Druggists, &c., &c. By FREDRICK HOFFMANN, Ph.D., Pharmaceutist in New York. 8vo.; pp. 393. New York: D. Appleton & Co., 549 and 551 Broadway. 1873.

Illustrations of the Influence of the Mind upon the Body in Health and Disease; designed to Elucidate the Action of the Imagination. By DANIEL HARK TUKE, M.D., M.R.C.P.: joint author of "The Manual of Psycological Medicine," &c., &c. 8vo.: pp. 415. Philadelphia: Henry C. Lea. 1873.

Contributions to Mental Pathology. By I. RAY, M.D., author of the "Medical Jurisprudence of Insanity" and "Mental Hygiene." 8vo.; pp. 558. Boston: Little, Brown and Company. 1873.

CANADA

Medical and Surgical Journal.

MONTREAL, APRIL, 1873.

THE ONTARIO MEDICAL AMENDMENT BILL.

We observe that the bill of amendment to the Ontario Medical Act was rejected by the Committee of the House, and we do not at all wonder at it, because, in the first place, it was the most extraordinary production of its kind that had ever been submitted; and, again, if the Legislature was guided by the opinions of the profession in Ontario it had no other alternative but to ignore the bill, as the opinions were many and various, as expressed in the daily press; nor do we think that the Medical Council itself was in accord on the subject. We have heard that the Executive Committee of the Medical Council notified the Examiners that in view of the small number of candidates likely to present themselves at the coming examinations and the lack of funds, the customary remuneration to the Examiners could not be guaranteed, and a request was made that they should state whether they are willing to conduct the examinations on the uncertainty of being paid for their loss of time. This action of the Committee was forced upon them, but we do not think it at all likely that any of the Examiners will, under the circumstances, refuse to conduct the examinations; by so doing they will show themselves unworthy of the trust they assumed at their nomination.

But, referring again to the Bill in question, the Council has asked too much of the profession. It is right and just that the profession should be taxed and we do not doubt that it will freely admit its indebtedness, but not to the surrender of rights already possessed. The Bill in effect deprived every defaulter of his license, and he became liable to prosecution, fine and imprisonment for exercising his calling, if he failed, through inadvertance or incapacity, to pay the sum of two dollars on or before the 1st of January of each year. Furthermore, by the provisions of the Bill the onus of proof, as to the correctness of the register, was thrown on each member of the profession. The experience of the profession as to the business capacity of the College official is far from being satisfactory. It was notorious that the late registrar of the College never presumed to answer official letters, and many of the candidates who have passed the College examinations do not possess a single document in proof of their having

submitted to the required tests by examination. These facts are sufficiently glaring to shake the confidence of the profession in the good faith of the College, and we do not believe that so long as these irregularlties continue the profession will in any way second the proposal to support a corporation so ill-managed. If it is desirable to have an Act like the Ontario Medical Act, and we regard it as a good Act in many respects, it is also desirable to have it well administered. The Executive should be well paid; or, at least, reasonably paid, for its loss of time; but, in exchange it should honourably perform its part, and not slur over duties which it is expected to perform to the profession at large. No fault can be found with the Examiners, nor with the examinations. All appears to be fair and above suspicion, but having done the work imposed on them, it then becomes the duty of the College officials to see that their part is equally well performed. Official papers and documents should not be mislaid. The evidence of registration should not alone be left to the possible chance of the errors of a printer. An official document in the shape of a diploma is not too much to expect for the price paid for an examination—$60. We mention these facts because they have been the subject of complaint. The College must place things on a different basis, these irregularities must cease, and when a new state of things is inaugurated, and it is seen that earnestness of purpose and regularity of action has become the rule, then may the College of Physicians and Surgeons of Ontario expect the full and hearty co-operation of the profession, and we doubt not the result will be to the full satisfactory.

ANNUAL CONVOCATION McGILL UNIVERSITY.

The Annual Convocation of McGill College was held in the William Molson Hall of the University on Friday afternoon, 28th March, 1873, for the conferring of Degrees in the Faculties of Medicine and Law. A large assemblage of the friends of the University and of the graduates were present. About 3 o'clock the members of the Convocation who had assembled in the Library made their appearance in order of precedence and took their seats, the Chancellor presiding.

The Rev. Prof. Cornish opened the proceedings with prayer.

Mr. Secretary Baynes read the minutes of the last meeting of Convocation, after which the Dean of the Medical Faculty, G. W. Campbell, A.M., M.D., read the following report of the Medical Faculty for the Session just closed:

The total number of Students in the past Session was 154, of whom there were from

Ontario	85
Quebec	53
United States	10
Nova Scotia	3
New Brunswick	2
Prince Edward's Island	1
	154

The number of Students who passed their Primary Examination, which includes Anatomy, Chemistry, Materia Medica, Institutes of Medicine, and Botany or Zoology, was 35, alphabetically arranged as follows:

Name.	*Residence.*
Bigelow, Horatio R	Boston, Mass., U. S.
Cameron, James C	Montreal, Quebec.
Chevalier, Napoleon E	St. Gregoire le Grand, Quebec.
Cline, John D., B.A	Cornwall, Ontario.
Cutter, Fred rick A	Hopkinton, New York, U. S.
Harvey, Wellman A	Newbridge, Ontario.
Henderson, Edward G	Belleville, "
Hickey, Samuel A., B.A	Aultsville, "
Hockridge, Thomas G	Bradford, "
Hume, William L	Leeds, Quebec.
Jones, Charles R	Hastings, Ontario
Jones, George Nelson	St. Andrew's, Quebec.
MacDonald, Roderick A	Cornwall, Ontario.
McBain, John	Williamstown, Onta io.
McCormick, Andrew G	Durham, Quebec.
McDonell, Alexander R	Loch Garry, Ontario.
McMillan, Æneas J	Edwardsburgh, Ontario.
Mines, William M	Montreal, Quebec.
Molson, William A	" "
Monk, George Henry	" "
Moore, Charles S	London, Ontario.
Moore, Jehiel T	Holbrook, "
Norton, Thomas	Montreal, Quebec.
Pattee, Richard P	Hawkesbury, Ontario.
Phelan, James	Stratford, "
Prosser, William O	Lunenburg, "
Rattray, James C	Portage d Fort, Quebec.
Reddick, Robert	Prescott, Ontario.
Ritchie, John L	Halifax, Nova Scotia.
Rogers, Amos	Bra ford, Ontario.
Sinclair, Coll	St. Thomas, "
Speer, Andrew M	Richmond, Quebec.
Wales, Benjamin N	St. Andrews, "
Wallace, Isaac W	Milton, "
Woolway, Christopher J	St. Mary's, Ont.

The number of Students who passed their First Examination for the Degree of M.D., C.M., was 35, alphabetically arranged as follows:

Name.	*Residence.*	*Subject of Thesis.*
Alguire, Duncan O	Lunenburg, Ont	Auscultation.
Bell, Robert W	Carl t n Pl ce, Ont	Post-partum Hæmorr'age
Brown, Harry	London, "	Sleep and its Derang'm'ts
Carmichael, Duncan A	Beechburg, "	Chronic Bright's Disease.
Chevalier, Napoleon E	St. Gregoire le Grand, Q	Intermittent Fever.
Cutter, Frederick A	Hopkinton, N. Y., U.S.	Cerebro-Spinal Fever.
Edwards, Oliver C	Clarence, Ont	Sy, h. Affec. of Nerv. Sys.
Ellison, Saram R	St. Thomas, Ont	Lobar Pneumonia.
Ewing, William	Hawkesbury, "	Urinary Calculus.
Farley, John J	Belleville, "	Phy ical Diagnosis.
Fortune, Lewis M	Huntingdon, Quebec	Erysipelas.
Gaviller, Edwin A	Bond Head, Ont	Erysipelas.

Name.	*Residence.*	*Subject of Thesis.*
Guest, Thomas F.	St. Mary's, "	Tubercular Meningitis.
Hills, Joseph	St. Gregoire, Quebec	Diabetes Mellitus.
Hurlburt, Richard N.	Mitchell, Ont	Syphilis.
Jackson, William F.	Brockville, Ont	Diphtheria
Jones, H. J. Montg'ry.	Montreal, Quebec	Aphasia.
Kelly, Thomas	Durham, Ont	Epilepsy.
Kittson, Edmund G.	Hamilton, "	Alcohol.
McGuire, Bernard D.	Joliette, Quebec	Asthma.
McConnell, John B.	Chatham, "	Bronchitis.
McDiarmid, James.	Prospect, "	Variola.
McDonald, Jos. D A.	St. Francois du Lac, Q.	Phlegmasia Dolens.
McLeod, James	Wigg, P. E. I.	Pathology of Inflammation
O'Brian, Robert S B.	L'Orignal, Ont	Hygiene of Childhood.
O'Brien, David	Almonte, "	Acute Rheumatism.
Perry, Hezekiah R.	Coteau Landing, Quebec	Rickets
Richmond, Pete. E.	N. Y. State, U. S.	Acute Rheumatism.
Shepherd, Francis J.	Montreal, Quebec	Hospital Reports.
Stephenson, John A.	Cayuga, Ont	Puerperal Fever.
Tracy, Andrew W.	Island Pond, U. S	Vaccination.
Walton, George O.	Montreal, Quebec	Progressive Locomotor Ataxia
Ward, William T.	Boundary Line, Quebec.	Ovariotomy
Young Robert C.	Barton, Ont	Erysipelas.
Whiteford, James W.	Belleville, Ont	Cholera Infantum.

Three of the above-named gentlemen, Messrs. Alguire, Ewing, and Jackson, have not yet completed their twenty-first year, and cannot, on that account, receive their Diplomas at this Convocation. They have, however, passed all the examinations, and fulfilled all the other requirements, and only await their majority to receive the Degree.

EXAMINATIONS IN BOTANY AND ZOOLOGY.

BOTANY.

Class. I.	*Class II.*
J B Benson, (Prize).	C. M. Laney.
W. Smith.	A. McCormick.
J. S. Gray.	S. R. Falls.
W. Crothers.	H. J. Metcalfe.
P. R. Young.	L. Secord.
J. R Nason.	J. M. Nelles.
J Livingstone.	J. Dowling.
R. N Powell.	A. J. Lindsay.
G. McRae.	F. S. Snider.

Class III.

F. Brossard.	W. D. Ross.
C. N. Stevenson.	G E. Bomberry.
C. Stroud.	R. Levi.
G. Colquhoun.	G. J. Robinson.
H. L. Gilbert.	M. Hanover.
H. Hunt.	J. H. Alcorn.

A. D. MacMillan.

ZOOLOGY.

Class I.	*Class II.*
E. Quinones, (Prize).	N. S. Brown.
	H. Siever.

PRIZES.

The Medical Faculty Prizes are three in number:

1st. The Holmes Gold Medal, (founded by the Faculty in honour of their late Dean) awarded to the graduate who receives the highest aggregate number of marks for all the examinations, including Primary, Final, and Thesis.

2nd. A Prize in Books, for the best examination—written and oral—in the Final branches. The Gold Medalist is not permitted to compete for this prize.

3rd. A Prize in Books, for the best examination—written and oral—in the Primary branches.

The Holmes Medal was awarded to Thomas Kelly, Durham, Ontario.

The Prize for the Final Examination was awarded to Duncan O. Alguire, Lunenburg, Ontario.

The Prize for the Primary Examination was awarded to John D. Cline, B.A., Cornwall, Ontario.

The following gentlemen, arranged in the order of merit, deserve honourable mention:

In the Final Examination: Messrs. Shepherd, Carmichael, Jones and Bell.

In the Primary Examination: Messrs. Woolway, Mines, Sinclair, Ritchie, Cameron, Phelan, Molson, Henderson and Hume.

PROFESSORS' PRIZES.

Botany.—T. B. Benson. *Zoology.*—E. Quinones.

Practical Chemistry.—William T. Ward.

Practical Anatomy—Senior Class—H. C. Fuller.

" —Junior " —J. Livingston.

The Graduates in Medicine were then brought forward, and the "Sponsio Academica" having been administered by the Registrar, Professor Craik, M.D., the ceremony of capping was performed by Principal Dawson.

The valedictory address on the part of the graduates was then delivered by Dr. Stevenson, after which Professor G. P. Girdwood, M.D., addressed the graduates on behalf of the Medical Faculty. (This address appears elsewhere in our Original department.)

After the proceedings of the Law Faculty and an address from the Chancellor the benediction was pronounced by His Lordship the Metropolitan and the Convocation adjourned.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

Case of Dislocation of the Femur Downwards and Forwards into the Thyroid Foramen -- Successful Reduction after Eight Weeks —Recovery with Useful Limb. By A. Dixon Wagner, M.D., C.M., Dickinson's Landing, Ontario.

On the 4th January, 1873, I was requested to see a little girl aged ten years, who was represented as suffering from rheumatism. The chief seat of pain was in the left thigh. There was no swelling, but she complained of a dull aching in front and about the junction of the middle. with the upper third of the thigh. On examination in the standing position, the left thigh was flexed and abducted, the heel raised from the floor, the limb was advanced, the toe pointed outwards and forwards, the body was inclined forwards towards the affected side, and on rotating the limb the round head of the thigh bone could be felt distinctly in the thyroid foramen. There was considerable flattening of the hip, the trochanter major was not as prominent as on the other side, and the adductor muscles on the inside of the thigh were rigid, the limb was lengthened $1\frac{1}{4}$ inches. There was considerable immobility, but the child could walk and bear the weight of the body on the limb, the gait, however, was awkward, and she limped badly.

The previous history was as follows: J. B., aged ten years, a spare but well-nourished child, while returning from school on the 12th November, 1872, attempted to jump across a pool of water, the left leg being in advance, she slipped, the left ankle turned under her and she fell heavily on the left hip. She was considerably jarred and was unable to rise, the left leg was out from the body and she could not bring it on a level with the other side. With assistance she managed to get on her feet and succeeded in reaching home, though with some difficulty. During the ensuing week she was unable to get about, but on the sixth day after the accident, or on the 18th November, she returned to school, walking half a mile with much inconvenience and some pain. At the

end of a week the pain in the hip was so considerable that she remained at home, but was not confined to her bed. Matters were allowed to progress without professional advice up to the 4th January, seven weeks and four days after the accident, when I was requested to treat her for an attack of rheumatism. I informed her friends of the nature of the injury, and appointed the following day, when, with the assistance of my father, W. H. Wagner, M.D., I purposed attempting reduction of the dislocation.

January 5th.—The patient was thoroughly placed under the influence of chloroform, and the round head of the bone was satisfactorily made out in its abnormal position. As there was great fixity of the limb it was decided to make use of the pulleys. This was done in the usual lateral method. After continuing the extension for some time the ankle of the affected side was grasped and the limb strongly adducted in a plane beneath that of the sound limb. These efforts were continued for some time, but without effect. Fearing that reduction was not likely to take place, this method was relinquished and rotation resorted to. The left hand grasping the limb below the knee and the right the ankle, the leg was carried round in the usual way and rotation inwards practised, but without success. This was repeated several times, but not wishing to excite much inflammatory action we desisted. On examining the limb we found that mobility was greatly increased, eversion somewhat diminished, and with slight force the heels could be brought together. This, I supposed, was due to the rent in the capsule being enlarged; or, that the anterior fasciculus of the Y ligament had been ruptured.

The following day a second attempt was made. On this occasion extension was made from the ankle, while a strong piece of cotton was passed around the upper part of the thigh and over the shoulders of an assistant who made strong lateral traction. Adduction was simultaneously practised, but without effect. After both attempts the little patient suffered considerable pain about the joint, and morphia had to be given to obtain rest. After a consultation with the friends it was decided to make one more trial and to procure further surgical assistance. With this end in view I telegraphed my friend Dr. G. E. Fenwick, of Montreal, and he came up on the following Thursday, 9th January, when reduction was effected in the following manner: A wet towel was placed on the limb above the knee, to which the pulleys were attached. A sheet was passed between the thighs and fastened over the shoulders on the sound side. A strong jack towel, through which one end of the sheet passed, encircled the limb at its upper extremity. All being now ready, chloroform was given, and when

the little patient was thoroughly under its influence, traction was made in the direction of the axis of the limb, that is downwards and outwards. The jack towel, over the shoulders of an assistant, forcibly drew it outwards from the body, at the same time the limb was forcibly adducted, the towel in the groin acting as a fulcrum. After some little time the bone slid into its socket with a slight jar, which was distinctly felt but not audible. After removal of the apparatus the appearance of the limb had materially changed. The trochanter was as prominent on the one side as the other, the head of the bone could no longer be felt in the thyroid foramen, the adductor muscles were no longer on the stretch, and the limbs were of equal measurement. The patient did not complain of pain, but said her leg was sore above the knee where the skin was slightly ruffled from the bandage; in every other respect she said she felt comfortable. As it was necessary to secure absolute rest the limb was put up on a long splint, without a perineal belt, but with a broad band encircling the pelvis.

January 10th.—Patient passed a good night; no pain or uneasiness, but general soreness; no starting of the muscles; eats well and feels comfortable.

January 14th.—Since last visit no change has occurred; everything appears to be progressing; the joint, however, is tender, as a slight blow over the trochanter occasions pain. There was nothing of importance to notice up to January 30th, when I removed the splint and examined the joint. Pressure behind the trochanter elicits pain, and a blow over the trochanter has the same result. The general symptoms remain unchanged. The splint was reapplied for the purpose of keeping the joint at rest. This was kept up for a fortnight longer, when it was removed and a long splint with weight attached substituted, as I feared subsequent hip-joint trouble. The tenderness appeared to me greater than at first examination, although she did not complain, nor did her general health in any way suffer. This extension was kept up for three weeks, when the tenderness appeared to have gone. The dressings were then removed and she was allowed to leave her bed. At the time of making this report she is up and able to go out. Her general health is very good. She can walk on the limb, but it is rather stiff, nevertheless it may be reasonably hoped that in time she will regain the entire usefulness of the limb.

It may be regarded as very rare, the reduction of this form of displacement after eight weeks. Sir A. Cooper was of opinion that although dislocations of the hip had been reduced at longer periods, yet for the hip, eight weeks after the dislocation is the limit at which

surgeons should attempt reduction. There are, however, several cases on record where reduction of a dislocated hip was effected after six months, and even after twelve months.

According to a table published in Professor Frank Hamilton's excellent treatise, it would appear that reduction of dislocation of the hip has been effected twice at the end of a year, and five times at the lapse of six months. These cases were instances of dislocation of the femur upwards on to the dorsum of the ilium. It appears to be the generally received opinion, however, that dislocations of the hip. if reduced after a lapse of two months, are exceptional. Sir William Fergusson has never seen a successful attempt beyond the period of three weeks, but he considers it advisable to make the attempt and resort to all reasonable means at a much longer date. We must bear in mind that long-continued or repeated attempts at reduction in old dislocations have been followed by various disasters, such as fracture of the neck of the femur, inflammation in and around the joint, suppuration, rupture of blood vessels, and even fatal peritonitis, or death from irritative fever.

The success of this case has induced me to publish the results, which are gratifying to myself and, I feel, of value to the profession.

DICKINSON'S LANDING, April 17th, 1873.

Case of Cerebral Apoplexy—Death. By Dr. W. B. BURLAND.

(Read before the Medico-Chirurgical Society.)

On the evening of the 6th March I was called to attend Mrs. S. Upon entering the room I found her lying on the floor in a comatose condition. The facts of the case are these: She had risen that morning feeling quite well, and had gone about her household duties as usual. While at supper (7 o'clock) her son observed that she suddenly ceased to take part in the general conversation and appeared to him, for the moment, to be "taking a nap," as she was in the habit of doing; her head was thrown forward upon the chest, and she was reclining in her chair. Her son asked her if she was going to sleep so soon. Receiving no reply he spoke louder and, finally, shook her; but still to no purpose. Feeling alarmed for his mother's condition, he immediately came for me, and during his absence the other members of the family had placed the patient upon the floor. From her previous history I noted the following: That she had suffered from rheumatism; that she frequently complained of pains at the lumbar region, and as a female member of the family expressed it, "she was fre-

quently troubled with gravel," for which she used to take sweet spirits of nitre; she would, moreover, at times complain of a fulness in the head, with great pain referable to the parietal region, and this was followed by more or less stupor and inability to comprehend (for the time being) what had been said to her; at other times slight emesis would succeed these head symptoms; she would, on such occasions, remain in bed for one, two or, perhaps, three days, and return to her avocations in apparently excellent health: her appetite was very good, but she suffered considerably from indigestion and constipation, frequently going for three, four or five days without having a stool. In stature she was large and broad-chested, with neck proportionately large, but not unnaturally short: she was fifty-four years of age. In my opinion, she was rather of the phlegmatic than plethoric habit.

At my first examination I found the pulse soft, slow, and compressible—beating at 58; face pale and natural: pupils contracted, with the eyeballs fixed; there was also considerable emesis, of the appearance and consistence of coffee grounds, and she had micturated and defecated involuntarily. I regret to say that I was unable to obtain her urine. At this stage I failed to perceive any evidence of paralysis. Finding the patient in this critical condition I called Dr. Roddick in consultation, who promptly responded to my request. Before Dr. Roddick arrived she had a convulsive attack which lasted a few seconds, and was followed, for some time, by an increase in the heart's action; the pulse now being full and bounding; the face presented no alteration in colour, neither did it exhibit any marked evidence of paralysis (the spasmodic contractions of the muscles being symmetrical), and the pupils were now contracted to about the size of a pin's head; there was no strabismus; spasmodic action of the diaphragm, evidenced by hiccough, continued for some time after the attack, or rather until gastric irritation was relieved by vomiting. Now, for the first time, the respiration became stertorous and remained so for a few minutes, when, gradually losing its pitch, it became much hurried. I now found the pulse beating 60: respirations, 32; the pulse-respiration ratio being thus considerably disturbed. The temperature, which was, of course, increased with the circulation, now became much lowered, and a clammy sweat bedewed her body. I deemed it advisable to administer a stimulant, and ordered 1 ounce brandy, which she swallowed quite readily, thus showing no impairment in the power of deglutition.

Shortly after this Dr. Roddick arrived. Hearing from her friends of her rheumatic history, we carefully examined her heart, but found nothing to indicate an abnormal condition of that organ.

With the somewhat imperfect history of the case obtained from her friends, and the symptoms presented, the question in our minds, as to diagnosis, rested between embolism and cerebral hæmorrhage. The fact of there being no heart murmur recognised was no proof that there might not have been vegetations (small fibroid growths) on the valves, one of which might have been displaced and carried to the middle cerebral artery. Again, taking her history as a guide, and from the age of the woman, we were also warranted in the assumption that the arteries were diseased, one of which had given way in the brain, resulting in effusion of blood. Hemiplegia was now well marked, the right side being paralysed, from which we concluded that the lesion was in the left side of the cerebral mass. One circumstance which, perhaps is worthy of notice was that at times she would raise her left arm and carry it to her head, and with her hands pressing firmly against the side of her head.

At Dr. Roddick's suggestion I treated the patient on the principle of counter-irritation; applied a sinapism to the nape of the neck, followed by a blister; a large sinapism over the epigastric region; and I also administered a stimulating enema of castor oil and turpentine, with the effect of producing copious evacuations. Excepting a slight increase in temperature, no further change took place till about one o'clock, when she again had slight convulsions, just sufficiently long to enable me to discover paralysis of the left side of the face. The symptoms succeeding this attack were very characteristic of approaching dissolution. The heart's action became tumultuous; the pulse hard and full, but very irregular; the respiration exceedingly harsh, and she evacuated the contents of her bowels profusely. The reactionary stage now set in rapidly; the pulse became soft and thready; breathing much laboured, the respiratory muscles acting forcibly, and the temperature of her body fell considerably; the pupils were dilated and quite insensible to light. In this condition she remained until about half-past three o'clock, when she died comatose, thus having been for a period of nearly nine hours unconscious.

Having formed the opinion that the case was one of cerebral hæmorrhage, I was anxious to satisfy my mind as to the correctness of my view, and accordingly, although with considerable difficulty, I prevailed on the family to permit a post-mortem examination. The results of the autopsy, at which Drs. Roddick and Bull kindly lent their assistance, are, in so far as we were enabled to proceed, herewith submitted:

Thirty-two hours after death rigor mortis was not well marked. On removing the calvarium, which was firmly adherent to the

dura mater, the latter was found intensely injected, so that its entire surface was covered with points of bleeding veins; the membrane was also dark, and the surface of both hemispheres was covered by large veins gorged with blood; the arachnoid membrane was thickened and dull in appearance, with effusion of serolymph beneath it. At the base of the brain the sub-arachnoidean spaces were filled with serum in which flocculi of lymph were floating. On making a section into the left hemisphere, in the position of the centrum ovale minus, the punctæ vasculosæ were noticed to be very large and injected. In the attempt to demonstrate the lateral ventricle the knife revealed a dark substance which on further investigation proved to be a blood clot. This latter was found to occupy the entire lateral ventricle, besides having broken down by its pressure a large portion of the matter surrounding the ventricle. The clot was firm, but very dark in appearance, and extended even through the midline into the ventricle of the opposite hemisphere. On the right side nothing abnormal was discovered excepting the intrusion of a portion of the clot as above described. We examined carefully, and afterwards removed the entire circle of Willis, with the hope of finding the ruptured vessel, but without any very satisfactory result. The arteries were, however, extensively diseased, plates of atheroma being scattered here and there over their surfaces. I saved the entire circle and beg to submit it for your inspection.

To be obliged to desist at this stage of the examination was no less mortifying to us than it will be a disappointment to you; but the wishes of the friends had to be acceded to, as they were determined that we should proceed no further. We could not even gain access to the bladder, by which we might have added another link to the evidence, by obtaining a specimen of the patient's urine. We were most anxious, besides, to obtain a view of the kidneys, which, perhaps, would have resulted in the discovery of fibroid disease of those organs. The valves of the heart, too, might have added considerably to the interest of the case, for although, as I have stated in a previous part of my report, there was no valvular murmur discovered, still there might have been some evidence of atheromatous disease in the heart itself, or the vessels immediately arising from the heart.

Right Hemiplegia with Aphasia. Reported by T. G. Roddick, M.D., House-Surgeon, Montreal General Hospital.

(Read before the Medico-Chirurgical Society.)

G. D., aged 62, jail-guard by occupation, was admitted into the Montreal General Hospital on the 14th January, 1873, under the care of Dr. Howard, being recommended by Dr. Scott. Is a short, stout man, hair and whiskers grayish, ruddy complexion, short neck, limbs muscular; has never indulged in spirits or malt liquors for twenty-two years. On the morning of Saturday, (January 11th), preceding his admission to hospital, he came from the jail, as usual, to breakfast at his own house. His wife noticed that the juice of the tobacco he was chewing was constantly trickling out of the right corner of his mouth, which she remarked more particularly on account of his ordinarily very cleanly habits. While at breakfast, also, the coffee he drank would run out of the same corner of his mouth and annoy him incessantly. At 11 a.m. same day he tried to split wood, but the axe was constantly flying from his grasp, and when he made a blow at the billet his right leg would give way under him, and he staggered and almost fell several times. At dinner he was much worse than in the morning, and could not bring the knife to his mouth without the assistance of the left hand. He persisted in going on duty at 2 o'clock in the afternoon, and while pacing the jail yard was seen by one of the prisoners to fall as though struck down. When found he was deeply insensible, and made no attempt to speak for an hour, at the end of which time he was removed to his residence. When spoken to he would invariably say "yes" to every question asked, and when any reference was made to his condition he pointed to his head, and altogether appeared to understand all that was said to or of him. He remained precisely in this condition until his admission to hospital three days after the attack. Up to this time he has never passed water in bed, but would insist on being raised when requiring to empty his bladder or bowels.

His condition on entering the hospital was as follows: Total loss of sensation and motion of the entire right side; the eyelids are not closed simultaneously; the tongue is protruded slightly to the right side; the leg is slightly rigid; the arm not so; he is very emotional, crying when suddenly spoken to, or when he finds he cannot speak; makes desperate efforts to articulate, but fails: evidently understands what is said to him, as he makes signs with his left hand; cannot even say "yes," as he did at first; there is now incontinence of urine, but it is difficult to keep a urinal in position on account of his restless condition: pulse 96, and regu-

lar; temperature 98¼ on sound side, and 99 4-5 on paralysed side; respiration normal.

Jan. 15.—Has been very restless all night; he is still unable to articulate, and still very emotional; the pupils are alike; the difference in power over the eyelids is more marked to-day; the leg is still slightly rigid, but not the arm; the breathing is still more laboured and stertorous, and on examination of the throat the soft palate of the affected side was found to fall loosely, not acting like the other; there was no evidence, from stethoscopic examination, of heart affection. The urine was drawn off and carefully examined for albumen, with negative result. He was asked to write his name, which he did correctly with his left hand. It was subsequently ascertained that he had been from childhood left-handed. The temperature to-day is about normal and equal on both sides; pulse 90—full and regular. Ordered Potas. Iodid. grs. v. every four hours, and a turpentine enema.

Jan. 16.—No apparent change in condition. There is still the same trouble to keep him dry, but a flexible urinal has been secured which will, no doubt, answer the purpose better than the ordinary kind. On being asked to-day to write his name he would sometimes write "George," sometimes "Davis," and, again, part of each word. When shown any object, as a watch or pencil, and asked to write its name, he invariably wrote "George," though he at once saw and appeared surprised and annoyed at his mistake. Finally he became quite impatient at his repeated failures and refused to try any longer.

Jan. 17.—Facial paralysis is much more marked to-day, and he is very restless and anxious-looking. He was placed on a water-bed to prevent the occurrence of bed-sores. The bowels are rapidly becoming tympanitic. He is ordered another turpentine enema; Chloral, grs. xv. at bedtime.

Jan. 19.—Passed a very restless night and is much weaker to-day. In spite of every precaution bed-sores are beginning to form on the right buttock. He is still as conscious as before, and is evidently in no pain, but is sinking. Pulse, 118; temperature, 101¾°; respirations, 44—very laboured. Ordered a mixture containing Ammon Carb., grs. v. every three hours: Chloral, gr. xv. at bedtime.

Jan. 21.—Is rapidly growing worse; was very restless all night, crying out repeatedly. To-day he lies on his back seemingly in a semi-conscious condition, but when spoken to loudly is roused into more perfect consciousness. The bronchial secretion is rapidly collecting in the lungs as indicated by the breathing. The tongue is dry and moist and he cannot protrude it. He swallows with

great difficulty. The urine was again examined, and again found to contain no albumen. Died Jan. 22nd, at 1:15 p.m.

AUTOPSY TWENTY-FOUR HOURS AFTER DEATH.

Condition of Brain.—Membranes and surface of hemispheres normal and alike in appearance. On opening the left lateral ventricle an extensive patch of non-inflammatory softening was found extending for about an inch external to the corpus striatum of that side. The corpus itself was less firm than natural, and it as well as the softened brain substance was of a brownish-yellow colour. There was no fluid in the ventricle, and no appearance of a clot anywhere. The right side was healthy. At a subsequent examination of the arteries of the brain I found extensive atheromatous disease of their coats in places, and likewise made out the very interesting fact in connection with the case, viz., that there was a long and firm clot involving the entire calibre of the left middle cerebral artery for about three-quarters of an inch of its extent. There was also a small clot in the anterior cerebral of that same side, but soft, and near the termination of the vessel.

Kidneys —Left on the whole healthy. A considerable amount of fat in the pelvis, and the cortical portion was slightly thinned in places. The capsule could be removed with ease. Weight, 6 ounces.

Right Kidney very slightly congested, and cortex a little deficient. Weight, 5 ounces.

Heart very large; weight, 21 ounces. A large straw-coloured anti-mortem clot was found in the right auricle completely filling it, passing thence through the tricuspid orifice into the right ventricle and extending for about an inch into the pulmonary artery. The aortic valves were healthy. There was a small deposit of osseous matter around the fibrous ring of the mitral valve.

Lungs much congested, but otherwise healthy. There were old and strong adhesions on the left side binding the pleura down.

Liver, Spleen, &c., healthy.

I am in part indebted to Dr. Montgomery Jones, a graduate in medicine of this year, for the clinical facts above recorded.

Since this case was read before the Medico-Chirurgical Society I have found, from conversation with the man's wife, that she and the other guards at the jail with him had noticed, of late, many peculiarities in his manner and habits which he had not before possessed. From being of a somewhat amiable disposition he had become morose and very undecided in his movements. His memory, also, had become very much impaired, and this tended

to make him peevish and child-like. Very trifling accidents would upset his equanimity, and he failed signally in the attempt to cope with matters of any moment. He was especially grieved at his failures. This state of mind had existed for probably two months before he was finally struck down, and would lead one to suppose that the atrophic softening had been gradually progressing, the current of blood not having been completely obstructed through the artery. The atheroma present would probably favour the view of a gradual formation of clot, as minute quantities of fibrine might be from time to time arrested and separated from the general current by little projections of this adventitious growth within the arteries. There were no vegetations present on the heart valves, or, in fact, any valvular disease to account for the presence of this clot on the principle of embolism proper.

The aphasia or aphemia present might be considered the most interesting, if not the most instructive feature in the case. The theory propounded by Broca respecting the function of the third left anterior convolution found an exception in this case, as the atrophy did not extend to that point in the hemisphere. It will be seen, also, in the report of the case, that the patient was educated to the use of his left hand entirely, wherein is also an exception to the theory that the left is the educated hemisphere and, consequently, the one to which the faculty of articulate language should properly belong. Certainly the views on this subject, as generally entertained at the present day, received no fresh light from the case here recorded.

Case of Strangulated Femoral Hernia—Recovery. Under the care of Dr. HOWARD. Reported by T. G. Roddick, M.D., House-Surgeon, Montreal General Hospital.

M. M., aged 41, was admitted into Montreal General Hospital on the evening of January 17th, 1873, under the care of Dr. Howard.

Previous History.—Is a medium-sized, wiry-looking woman, dark hair, the mother of nine children, the youngest being six years old. Has never been troubled with constipation, but bowels have been regular all her life. Eight years ago she received a kick in the back from her husband, which shook her greatly, and in four or five days after she noticed a swelling in the *left groin*, which must have come on gradually, and was accompanied by little or no pain. She positively asserts that it never went away entirely, but that there has always been a little swelling in the part. Two years since it suddenly became much larger, accompanied by vomiting and

intense pain, and after fourteen hours it just as suddenly disappeared, leaving her quite well.

History of Present Illness.—During the forenoon of Thursday (16th) she was scrubbing very hard, lifting a heavy tub, &c., and about noon was seized with interior pain in the bowels, with constant vomiting and nausea. About 2 o'clock, while vomiting, the hernia again appeared, when the pain and vomiting increased. This condition of things lasted until the afternoon of Friday, 17th, when she was seen by Dr. Drake, but failing with the taxis without chloroform, she was ordered to the hospital, where she arrived at 7 p.m.

Present Condition.—On admission the vomiting still continued, but unaccompanied by pain. Dr. Howard saw her soon after and ordered her a hypodermic injection of morphia. He returned about 11 p.m. accompanied by Dr. Drake, with the intention of trying the taxis, or, if necessary, operating. Under chloroform, the former was found to be impossible, so the operation was decided on. The hernia had now lasted thirty-three hours. Pulse, 120.

Operation.—While under chloroform, Dr. Howard transfixed the skin and cellular tissue with a sharp-pointed bistowry in the long axis of the tumour, viz., obliquely from without inwards, and almost parallel to the position of Poupart's ligament. Carefully dissecting down on the director and finding he had not room, a short incision was made at right angles to the first. The sac was at length exposed and, on being opened, out flowed about ʒij. of serous fluid. The bowel was quite dark and congested, but could be returned with the greatest ease. There was little or no hæmorrhage. The edges of the wound were brought together with silver wire sutures, and the whole dressed with a large circular pad of lint, kept in situ by a strip of plaster and a flannel bandage. Pulse, 92. Ordered gruel and milk.

January 18th, 9 a.m.—Pulse 88, and regular; slept well without an opiate; free from all pain and uneasiness. Noon.—Dressings removed; all well. 10 p.m.—Pulse, 80; continues to take nourishment in small quantities; no inclination to vomit.

Janunry 19th.—Still very comfortable; pulse, 80; no pain; slept well during night; dressing changed; wound looks admirable; carbolic acid lotion applied.

January 20th.—Bowels moved during night and this morning; some pain during the motion; dressing removed; wound commencing to suppurate; removed two sutures; pulse, 78; is very comfortable.

January 21st.—Was very well up to the afternoon, when an

uneasy feeling commenced about the bowels and she began to complain of inability to pass water; her menses appeared also to-day. 10 p.m.—Dr. Howard had a catheter passed and about a pint of urine was withdrawn; considerable tympanitis.

January 22nd.—Had a motion during the night and passed urine at the same time; quite comfortable this morning; pulse, 82; wound is now suppurating freely; two more sutures removed and the carbolic dressing continued.

January 23rd, 10 a.m.—Begins to complain of pain in right inguinal region, with difficulty of micturition; pulse and temperature rose; pulse, 96; temperature, 101 2-5°. 9 p.m.—The retention disappeared towards night, but the pain in the bowels continued; gave an opiate and applied sinapisms.

January 24th.—Quite comfortable again; pulse, 80; no pain; slept well.

February 19th.—Wound continued gradually to improve; bowels regular; discharged cured.

Strangulated Femoral Hernia of Three Days' Standing—Operation—Death. By T. G. Roddick, M.D., House-Surgeon Montreal General Hospital.

On the evening of Sunday, 20th April, I was hurriedly called to see a woman in St. Urbain street, who was represented by the messenger to be in a dying condition. On reaching the house I found that the priest had also been sent for and that no hopes of recovery were entertained by the numerous friends who crowded the house. On inquiry I made out that about mid-day of the Thursday previous the patient, a woman over sixty years of age, had been suddenly seized with agonizing pain in the abdomen, chiefly on the right side, followed immediately by vomiting, and accompanied with feeling of great prostration. She attributed these symptoms to a constipated condition of the bowels, and accordingly, towards evening, took a dose of castor oil. This, however, only added to her misery, for throughout that night and all the day following she vomited incessantly, the smallest draught of water or other fluid being ejected immediately on reaching the stomach. On Saturday morning she was advised to try a dose of Epsom Salts, which she contrived to keep down for a couple of hours, when it was also rejected. The pain, during this time, was rapidly diminishing until, by the evening of Saturday, there was simply an uneasiness remaining. Hitherto the matter vomited had been clear and watery, containing, of course, any food or medicine she may have taken; but, early on Sunday morning it

became darker, having an offensive odour, and being, in fact, stercoraceous in character. This was repeated several times during the day until, about 7 o'clock in the evening, the woman being at the point of death, it was *desirable* to seek medical advice.

I found the woman lying on her back, with the right leg slightly drawn up, a tympanitic distension of the abdomen, and the entire body bathed in a clammy sweat. The lips were bluish, extremities cold beyond the wrists and ankles, and she spoke in a whisper. I had great difficulty in counting the pulse, but made it out to be about 150, and a mere flicker. From the history of the case and present condition of the patient I at once suspected hernia, although the woman was not herself cognizant of its presence, nor had she suffered from rupture. On examination I discovered a hard, circumscribed tumour, about the size of a walnut, in the right groin, having the position and ordinary characters of a femoral hernia. Even rather rough handling of the part caused apparently no pain, from which circumstance, and the fact that over three days had now elapsed since the occurrence of the rupture, I thought it advisable not to persist in any further attempts at reduction by the taxis. Having ordered brandy and ice in small quantities, with heat and friction to the extremities, I left to seek my friend Dr. Fenwick, whom I had decided on consulting as to the advisability of an operation. We returned in a couple of hours and, after careful examination of the case, decided that operative interference was the only warranted course. Accordingly, with the additional assistance of Dr. Chipman, Assistant-House-Surgeon, and Mr. Cameron, Apothecary of the Montreal General Hospital, I proceeded to operate, the patient being first well plied with brandy and put under the influence of chloroform. An incision of two inches in length was at once made through the skin and underlying fat in the line of Poupart's ligament by transfixing a fold of these tissues with a bistoury. With the aid of a scalpel and director the sac was soon reached and the bowel within felt to be firm and resilient. With the advice of Dr. Fenwick I did not open the sac, nor was it found necessary even to nick the ligament, simple distension of the stricture with the finger proving sufficient for the ready reduction of the hernia. The parts were felt to be in easy position within the cavity, the edges of the wound were brought together by three interrupted wire sutures, and a large compress of dry lint applied and secured with a flannel bandage. Strict quiet was enjoined. Nothing to be given the patient but small pieces of ice. Half an hour after the operation the pulse was 140, and much fuller than before.

Monday, 5 a.m.—The son reports that his mother has been very

comfortable since we left; that she slept soundly for three hours, and has never vomited or felt the least nausea.

9 a.m.—Pulse 96, of comparatively good volume; extremities warm; skin most; no pain; no tendency to vomit; tympanitis less; craves for food. I ordered a tablespoonful of milk containing half a teaspoonful of brandy to be given every half hour. She expresses herself thankful for the relief the operation has afforded and the friends are hopeful. Dr. Fenwick called about mid-day and found her in the condition just described. He could make no further suggestion as to treatment, &c.

4 p.m.—Pulse 88, but not so full as in the morning, and the hands and feet are cool and damp to the feel. She still has no pain and no tendency to vomit. The tympanitic condition of the bowels is now more marked than at any time since the operation. The face is flushed and, altogether, she is not so bright intellectually as I would like to see her. She continues to take the milk and brandy, the latter of which I ordered to be given more freely and in the form of punch.

I called again about 8 o'clock in the evening, but she was then evidently sinking, being in precisely the same condition as when I saw her twenty-four hours previous. She died, apparently of exhaustion, in about two hours.

That the operation prolonged the woman's life there cannot be the shadow of a doubt. From being absolutely *in articulo mortis* she came to be as strong as she had been during any part of the previous forty-eight hours. As will be seen by the report, she never had the slightest pain or tendency to vomit after the operation, the latter of which symptoms had been especially persistent. It may be asked: Why subject the patient, in such an extreme condition, to the fatigue and immediate dangers of so formidable an operation? Her age, too, might be seen to contraindicate such a course. But the result here speaks for itself, and was, considering the circumstances, most gratifying. The taxis, it may also be said, had not received a fair trial; but, on reflection it will be seen that too much care could not be taken in the manipulation of a knuckle of intestine in which gangrenous action had, in all probability supervened. Had the strangulation been recent we would have endeavoured to return it without operative interference.

Notes on Meteorology and Health. By Thos. D. King.

That atmospheric changes have considerable influence on the state of our health is now universally admitted. During what has been denominated unhealthy weather, when medical practitioners have spoken of the general ill-health of their patients, circum-

stances have been remarked which denote an irregular distribution of the atmospheric electricity.

"There can be no doubt," says the editor of the *British Medical Journal*, in an able review of a published paper on the effects of meteorological facts on insanity, "that, in certain low states of health, especially when the brain and nervous system are implicated, man becomes much more susceptible of atmospheric changes than when in health. Hitherto our meteorological observations have been limited to noticing the temperature, barometric pressure, amount of rain, the direction of the wind, presence of ozone, solar and terrestrial radiation, etc., without at all providing any means for watching the variations, either in quantity or quality, of *atmospheric electricity*—an omission that is all the more remarkable when we consider how universally ozone, the product as it were of electricity, has commanded attention both at home and abroad."

As far back as 1815, Forster, in his admirable treatise entitled "Researches about Atmospheric Phenomena," says: "But though we admit the influence of atmospheric peculiarities on our health, yet the manner and extent of their operation cannot easily be ascertained. They may deprive persons, already weak, of a portion of their electricity, and thus the energies of the brain and nervous system may be diminished; or the atmospheric electricity, being unequally distributed in the air, or propagated downwards at intervals, it may occasion an irregular distribution of it in our bodies, and produce an irregularity of function. A living animal consists, as to its vital parts, of numerous nerves, which give life, as it seems, to all the parts, and compose different organs of vitality and mind, and these must have some mover. We do not know that this moving principle is *electricity*, but it seems reasonable to ascribe it to something in the air; because deprived of good air we soon die. It would be vain to inquire into the principle of life; but as good air is necessary to its continuance, so bad injures it: so to some peculiarity in its quality we can reasonably ascribe as many unknown disorders, even were there not remarkable appearances in the atmosphere at the time of their prevalence. In whatever way the nervous functions may be disturbed, a disordered action of the digestive organs will be the probable consequence; and a state of nervous and digestive disorders being once induced, other diseases may insue, to which there may be a constitutional predisposition."

There can be no doubt—all experience proves it—that those persons are most likely to be disordered by atmospheric peculiarities, who have the greatest susceptibility of constitution, and, at the same time, the greatest weakness.

The ancients thought that there was an unhealthy quality in the air which was believed to excite disorder. See Lucretius, de Rer. Nat. Lib. VI.

Again, atmospheric peculiarities have their effect upon the lower animals. There are many instances on record of epidemic distempers among animals, which have prevailed only for a time, and which seem to be referrible to the atmosphere, to wit, the "Epizootic," which proved, during the past autumn, so fatal to the horses on this continent.

Virgil, in Georg. Lib. III., aptly alludes to the influence of unhealthy air on animals, though not subject to some of the general causes of human diseases, such as intemperance, gluttony and mental anxiety:

——— "Atqui non Massica Bacchi
Munera non illis epulæ nocuere repostæ,
Frondibus et victu pascuntur simplicis herbæ
Pocula sunt fontes liquidi atque exercita cursu
Flumina, nec somnos abrumpit cura salubres."

That electricity is greatly concerned in the matter there cannot be much doubt, and it is satisfactory to find that the subject is being taken up in England.

The Rev. Thomas E. Crallan, Chaplain to the Sussex County Lunatic Asylum, has found that with regard to *Melancholia*, with one single exception, that instances of augmented melancholic relapses occurred after considerable disturbance of atmospheric pressure and solar radiation, either in the same or in the opposite direction. There is no doubt left on his mind of the fact that such disturbances are always accompanied by, if not due to, *some alteration in the electricity*. He found that *ten* of these relapses occurred during thunderstorms.

Dr. Moore, of Dublin, Physician to the Cork-street Fever Hospital in that city, in a lecture recently delivered by him before the Royal Dublin Society, considers that the principal meteorological data which influence disease and death amongst the population of Dublin are, perhaps, mean temperature, rain fall, and humidity, and he treats the subject under three headings: *First*, the influence of season on thoracic and abdominal affections respectively; *second*, the influence of season on the progress of epidemics of recent years—namely, cholera and small-pox; *third*, the influence of season on four principal endemic and epidemic diseases—namely, measles, whooping-cough, scarlatina and fever.

The lecture entitled "Meteorology in its Bearing on Health and Disease," is worthy the study of the Faculty. The practical bearing of Dr. Moore's investigations is that some of the diseases

under consideration tend to prevail in the warm seasons of the year, particularly when there is a great excess of heat; others in the winter when there is a great excess of cold.

The practical object in alluding to meteorology in connection with disease and health is to induce the Faculty not to rest until a complete and proper series of observations are daily taken at regular intervals, say 6 and 9 a.m., noon, 3, 6 and 9 p.m., not only with the barometer, thermometer, and hygrometer, but with the electrometer.

An inexpensive and simple apparatus, made by that practical electrician Mr. Apps, of the Strand, London, can be adjusted to any house, either in the form of a conductor or of a captive balloon, with about eighty yards of gilt silk thread attached to it, and connected with one of Volta's condensing electroscopes.

Mr. Prince, of Uckfield, who has been long engaged in meteorological observations which he has published under the title of "The Climate of Uckfield, in the Weald of Sussex," remarks: "It is difficult to understand why certain animals should become so extremely sensitive to the approach of a decided change of weather. Some of them exhibit symptoms of uneasiness long before there are any visible signs, and often, too, when they have not the opportunity of going abroad. Hence it appears probable that any important change of weather is preceded by an indefinite alteration of the electrical condition of the atmosphere, the precise nature of which we are unable to determine."

Does it not become our bounden duty to attempt to determine these electric conditions? In order to do so "atmospheric electricity must be studied quite as carefully as the aërial temperature, moisture, and pressure; and, moreover, studied in connection with disease, and especially that of the nervous system."

The importance of these meteorological researches in connection with health and disease cannot be over-estimated, and yet, in the face of the ever accumulating testimony in favour not only of the speculative interest but also practical benefits of them, nothing comparatively is done in our Universities and public schools to give to students a knowledge of meteorological phenomena, such as the law of storms, the origin of cyclones, the causes of winds, the different electricities of the air, the electricities of showers, etc., and those peculiarities of atmosphere which affect the functions of organized bodies.

Medical students, in passing their examinations for the degree of M.D., are required to possess a certain knowledge of chemistry, botany, and other branches of natural history. It would not be amiss if they were required to have a knowledge of the use of the

microscope and certain instruments connected with the physical sciences, by means of which, they would acquire a power of the most valuable kind, applicable in a greater or less degree to the profession of medicine.

Coté, in his preface to the second edition of the *Principia*, 1713, says: "He must be blind who, from the most wise and beautiful contrivances of things, cannot see the infinite wisdom and goodness of their Almighty Creator; and he must be mad, or senseless, who refuses to acknowledge them."

There must be either blindness or obliquity of vision when such a study as meteorology is so utterly neglected by the Faculty, when we see the discoveries which philosophers are daily making relative to the extensive operation of the electric fluid, whose agency is concerned in producing every change in the Universe.

Correspondence.

I wish to draw attention to some erroneous statements which appear in Dr. Fenwick's medical journal concerning remarks upon Dr. Ross' case of meningitis.

The one point I brought before the Society at that time was concerning the nature of the meningitis, and from the history and post-mortem appearances I then thought, and think still, that it is questionable if it was a case of tubercular meningitis. I did not question the presence of pleurisy, but said that while at Quebec the man most probably had pneumonia, and that the history and post-mortem appearances of the lung inclined me to the belief that that organ was destroyed from that cause and not from tubercular softening, and that pneumonia was the chief factor present, without excluding pleurisy. I took occasion to clear up an ambiguity by remarking to Dr. Ross, *during his reply*, that I did not call in question his remarks concerning the presence of pleurisy, and that he had misunderstood me upon that point; so far, therefore, as concerns this subject, Dr. Ross' remarks in refutation are mere idle words spent in destroying an imaginary creation of his own mind. The real question is: Was the meningitis tubercular or was it not tubercular? That this question is a debatable point seems clear enough to me from the fact that *no tubercle was present in the meninges*. The presence of tubercle in other parts of the body does not affect the question in the least, even had the middle lobe of the right lung been destroyed from tubercular ulceration, which, by the way, was not the case.

Now, as to the President, Dr. Howard's remarks, that "he could not comprehend that any one familiar with pathology could question the tubercular nature of the meningitis," he surely cannot be unaware that the greatest of pathologists differ as to what tubercle is, and that it is difficult, if not impracticable, to distinguish tubercular growths from the products of inflammation," and that "the theory that tubercle is the result of exudation and deposit is now abandoned," and surely the appearances of the deposit upon the meninges in this case was the result of an exudation, and not an "outgrowth from lymphatic tissue." The inflammation of the meninges was not basilar, but rather to the side and base on which the otitis existed, and "it is not an admitted fact" that "basilar meningitis, with central *softening* of the cerebral substances, proves the tubercular nature of the meningeal inflammation." If Dr. H. will kindly give his authority for these statements I shall be happy to bring before the Society authors which support the views I now advance.

To return to the case in question I would merely state, in conclusion, that *all the writers* I have consulted state that *tubercular granulation in the pia mater is* ESSENTIAL to the disease. "The anatomical lesions are miliary tubercles, gray, round and flat bodies on the surface and in the meshes of the arachnoid, 2-5th to 4-5th of a line in diameter, and can be felt as granular bodies. Often these tubercles are clustered around small arterioles of pia mater, but are more abundant at the base of the brain, optic chiasm and Fissure of Sylvius."

Aitken says, "The *essential* morbid character is tubercle on the pia mater in the shape of gray or miliary tubercles."

So much for the tubercular aspect of the case; and now we will see what Troltsch says about otitis, and how far it supports the theory I advanced as to the nature of the case under discussion. He says that as the brain and cerebellum lie close to the auditory canal, a thin, osseous diploë—containing air—alone intervenes; that meningitis frequently occurs from inflammation of the auditory canal, without caries of the bones or perforation of the membrana tympani, and records a case of death from meningitis thus induced which occurred in Toynbee's hands, and another similar case in the hands of Sir William Gull.

I have made these statements in defence of what I believe to be the truth, and also in self defence. I have not wished, and do not wish, to hurt the feelings of any one; but, as our object is mutual improvement, I have fearlessly criticised whatever has come before me, and shall continue to do so as long as I remain a member of the Society, I wish to enter my protest against unne-

cessary and vindictive misrepresentations, as well as harsh and abusive remarks about the views of others. We have so much yet to learn that we can afford to treat the views of honest *confrères* with charity.

E. H. Trenholme, M.D.

[Dr. Trenholme has thought proper to call in question the accuracy of the report of the proceedings of the Medico-Chirurgical Society which appeared in the last number of this journal. We are constrained in self-defence to state that the report is in every particular correct. This we have from the evidence of gentlemen who were present and listened to his statements, which were, to say the least of them, wild and undigested. When gentlemen make a wholesale onslaught on a paper and differ in opinion with the reader of the paper on questions of fact, they should not feel aggrieved if a fair and honest report is made and published, although it may make them appear somewhat ridiculous. With regard to the question of the pathology of tubercle we leave it to those interested in the subject to notice the position assumed by Dr. Trenholme, but we cannot agree with him in the views he advances as bearing on the particular case under discussion. Dr. Trenholme considers that the report published by us was calculated to injure him professionally, but he forgets that his observations, made in anything but a disingenuous spirit to elicit truth, were calculated to do injury to a fellow practitioner. If Dr. Ross, in bringing before the notice of the Society a case of rare interest, is to be called to account for the accuracy and truthfulness of his statements, and a theory allowed to be propounded which is not consistent with the facts as observed, the propounder of such a theory cannot reasonably complain if his theory is shown to be erroneous.—Ed.]

INFLUENCE OF BELLADONNA ON SWEATING.

In some interesting communications to *The Practitioner*, Dr. Sidney Ringer brings forward an abundance of evidence to prove that belladonna and its active principle are able to check and prevent sweating, whether the result of disease, or induced by exposure to an elevated temperature. In the former case his observations enabled him to conclude that one two hundredth of a grain of atropia injected under the skin is generally sufficient to check sweating for one night. This dose produces dryness of the fauces, but does not dilate the pupils. Stramonium, it was found, is able to exert the same influence.

Reviews and Notices of Books.

The Science and Art of Surgery; being a Treatise on Surgical Injuries, Diseases and Operations. By JOHN ERIC ERICHSEN, Senior Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. A new edition, enlarged and carefully revised by the author. Illustrated by upwards of seven hundred engravings on wood. Vol. I. pp. 781; Vol. II. pp. 918. Philadelphia: Henry C. Lea. 1873.

This is a new American edition of Mr. Erichsen's well-known work on "The Science and Art of Surgery," published by the author in the United States, and is, therefore, not a reprint of the last London edition. The author remarks in his preface: "The "favourable reception with which the 'Science and Art of "Surgery' has been honoured by the surgical profession in the "United States of America has not only been a source of deep "gratification and of just pride to me, but has laid the foundation "of many professional friendships that are amongst the agreeable "and valued recollections of my life. In consequence of delays "that have unavoidably occurred in the publication of the Sixth "British edition, time has been afforded me to add to this one "several paragraphs which, I trust, will be found to increase the "practical value of the work." This edition, therefore, is the very latest enunciation of the surgical opinions and experiences of the author, and is additional evidence of his industry and increasing efforts to render his work worthy of that place in surgical literature which it deservedly occupies, not only as a book for reference, but for study by practitioners of surgery. The author, although desirous of preventing any unnecessary increase in the size of the volumes, found it impossible to keep within the limits of the last edition. A considerable addition to the text has in consequence been made, though much matter that had appeared in the edition of 1869 and had become somewhat obselete was struck out. Several chapters have been re-written; these alterations not being confined to any one section of the work; but the various subjects of which it treats have each in turn been carefully considered and revised. The illustrations have likewise undergone revision; several of the engravings have been re-drawn and about one hundred new illustrations added. The theory of the antiseptic treatment of abscess and wounds is so in accord with our own experience on this point that we cannot forbear calling attention to it. Mr. Erichsen, in speaking of suppuration and its

causes, observes: "We see suppuration take place in subcuta-
"neous wounds and in other situations (as boil and whitlow) into
"which no air has been admitted," in consequence "we cannot
"look upon the atmosphere as being either directly or indirectly
"the sole occasioning cause of this action." Our author goes on to remark that "it must be referred, in such cases, to the influ-
"ence of other agencies, amongst which certain morbid conditions
"of the blood, constitutional derangement of the patient, and
"intensity of inflammation are amongst the more important and
"direct," and, he continues, "it is undoubtedly these disturbing
"influences that prevent the complete success of the antiseptic
"method in a certain number of cases." It is only in adopting this common-sense view that we can account for many facts which appear to controvert the germ theory and the beneficial results of the antiseptic treatment of wounds; as, for instance, the fact that has been so often observed and reported of wounds healing without a drop of pus, in which no carbolic acid solution of any kind had been employed, nor other antiseptic agent, but in which common water has proved successful and been followed by similar results. These we have often seen. Sir James Simpson attributed successes of this nature to the use of the acupressure needle. In a private letter which we received from that distinguished physician two years before his death he remarks: "Lately, Dr. Pirie,
"Professor of Surgery, Aberdeen, wrote to me that he had fifteen
"cases of excision of the mammæ treated by acupressure, ten of
"these healed without one single drop of pus." Mr. Erichsen, however, lends the weight of his experience in favour of the antiseptic method of treatment, although fully recognizing the influence for good or evil of the state of the patient's constitution in the repair of wounds. He says: "When that is healthy and pure
"the wound will readily heal under any favourable local condi-
"tions, but under none, I believe, more readily than under the
"antiseptic method." This is in perfect accord with the observations of practical men.

The division of the subjects under consideration remains unaltered in any material degree. In the first division we have discussed the first principles of surgery, the opening chapters being devoted to general considerations on operations. Here is shown the objects of surgical operations, the knowledge required by a surgeon in attempting operations. This knowledge is not alone confined to a practical familiarity with the anatomy of the human body, but embraces an acquaintance with the science of surgery and medicine. Before resorting to operative interference the surgeon should acquaint himself with the nature of the local

disease, its extent, and any constitutional complications which may preclude the possible chance of beneficial results. It becomes a principle, therefore, from which there should be no departure, that surgical interference should never be attempted for the relief of a local malady where there exists extensive viciseral lesion. The author alludes to the practice of operating in notoriously hopeless cases, with a view to giving to the patient what is termed a "last chance." This he condemns as "much te be deprecated, and "should never be followed." And he goes on to remark: "It is "by operating in such circumstances, especially in cancerous dis- "ease, that much discredit has resulted to surgery; for in a great "number of instances the patient's death is hastened by the pro- "cedure, which, instead of giving him a 'last chance, only causes "him to be despatched sooner than would otherwise have hap- "pened."

We next have discussed, in the ensuing six chapters, the subjects of amputations and disarticulations, special amputations, inflammation, suppuration and abscess, ulceration, and the process of repair. This differs somewhat from the edition of 1869. In that edition the first principles were discussed in five chapters, and in the present edition the subjects of inflammation, suppuration and abscess, ulceration and the process of repair, have each a separate chapter.

In the second division on surgical injuries the arrangement and subjects discussed are in the same order of sequence, the matter, however, has received attention and revision.

The third division includes surgical diseases. In the edition of 1869 abscess and ulcers formed the two first chapters in this division; these subjects have, however, been changed in the present edition, and are considered in the first division of the work.

In conclusion, we must accord to Mr. Erichsen the highest praise for having, independent of his previously well-earned fame as a practical surgeon of eminence, and surgical author, continued to enhance the value of a work which can, with advantage and profit, be studied by practitioner and student, and which must be regarded, as a surgical authority—unrivalled in the English language.

Contributions to Mental Pathology. By I. Ray, M.D., author of the "Medical Jurisprudence of Insanity" and "Mental Hygiene." 8vo.; pp. 553. Boston: Little, Brown and Company. 1873.

Dr. Ray has already given to the profession an elaborate work on the "Medical Jurisprudence of Insanity," also a work on

"Mental Hygiene." These were well received by the profession and are frequently quoted and referred to by other authorities on this special branch of medical science. The work before us is a collection of papers which have already appeared from the pen of the author, and been published in various medical periodicals. In his preface he states that he is induced to put these papers in a more accessible form because "the subjects they discuss have lost none of their original interest, and many of the question they present, are far from being settled"; moreover, the interest taken in the disease insanity, which possesses such important bearings on private happiness and social order, has by no means abated; the profession and the public seeking with avidity for anything that will elucidate the subject.

The work consists of twenty-two separate papers. As an introduction we have an address delivered by the author on the occasion of the laying of the corner stone of the State Hospital for the Insane, at Danville, Penn. We next have a paper on the "Causes of Insanity"—a paper which will be found in the reports of the Butler Hospital for the years 1863-4. The next four papers first appeared in the *American Journal of Insanity.* These are severally on the "Statistics of Insanity," "Objections to Moral Insanity Considered," "Doubtful Recoveries," and a chapter on "Delusions and Hallucinations." Many of the other chapters, all of great interest to the legal and medical practitioner, appeared either in the *American Law Review* or the *American Journal of Insanity.* There are excellent papers on the "Insanity of Seduced and Deserted Women," on the "Management of Hospitals for the Insane," on the "Insanity of King George the Third," and on "Shakespeare's Illustrations of Insanity." All these subjects are treated in a masterly style and are deeply interesting. We heartily commend this work to our readers; more especially will it be found of use to members of the bar as to those who are engaged in the study of legal medicine. The style is clear, condensed, and very readable.

RECEIVED FOR REVIEW.

Manual of Chemical Analysis as Applied to the Examination of Medicinal Chemicals; a Guide for the Determination of their Identity and Quality, and for the Detection of Impurities and Adulterations. For the use of Pharmaceutists, Physicians, Druggists, &c., &c. By FREDRICK HOFFMANN, Ph.D., Pharmaceutist in New York. 8vo.; pp. 393. New York: D. Appleton & Co., 549 and 551 Broadway. 1873.

Surgery.

AN IMPROVED MEANS OF PLUGGING THE POSTERIOR NARES.

By A. Godrich, M.A., M.R.C.S.

I beg to submit to professional notice an instrument that I had constructed by Messrs. Louis Blaise & Co., of 67 St. James's Street, for plugging the anterior and posterior nares in cases of epistaxis. I have long been struck by the unsatisfactory means at our disposal in dealing with such cases. There is, in the first place, owing to its large curve, no little difficulty in passing Bellocq's sound, the point of the instrument often hitching on the posterior edge of the floor of the nasal fossa. In the next place, the adjustment of the posterior plug, requiring, as it does, the passage of the surgeon's finger into the fauces, not only causes much distress to the patient, but often entails a more or less severe bite on the operator, as I have found to my cost; and lastly, when the plug is in position, the string passing from it through the mouth causes so much irritation of the soft palate and fauces, that but few patients have the courage to submit to it.

The instrument consists of a small elastic bag stretched on the end of a hollow style, by means of which it is pushed through the nasal fossa into the pharynx. It is then dilated with ice-cold water by means of the ordinary ear-syringe, the nozzle of which is inserted into a piece of India-rubber tubing tied to the other end of the style. A small piece of thread or twine tied round this prevents the water from escaping. The bag, thus dilated, is now to be drawn well forward into the posterior nares, into which, by its elasticity, it will accurately fit. The anterior India-rubber plug is next to be slid along the style (this is more easily done if the style be previously wetted) into the anterior nares, which it fits like a cork. The cohesion between this plug and the style will, I think, be suffioient to hold both plugs in position; if not, a piece of string tied round the style in front of the anterior plug will eusure perfect security.

When it is necessary to remove the plug, all that the surgeon has to do is to cut the string tied round the piece of India-rubber tubing, when the water will be expelled by the elasticity of the bag, and the instrument may be removed without difficulty.

The instrument even at its thickest end, where the elastic bag is stretched over the style, is not larger than a No. 6 catheter; and it can consequently be passed through the nasal fossa without the

least difficulty, and with very little discomfort to the patient, as I have proved by frequently passing it through my own nose. The style being made of elastic material—in fact, a gum-elastic catheter, and therefore capable of being bent to any curve required—also facilitates the introduction of the instrument. When once the instrument is in position, and quiet, it is almost impossible to tell by the sensations alone that there is any foreign body in the nasal fossa at all; the dilatation of the bag causing but little discomfort, being above the sensitive palate and fauces.

In designing this instrument, it has been my object to combine simplicity and cheapness with perfect efficiency. If I have not fully accomplished my object, I ask any one to suggest any alterations that may bring this instrument nearer to perfection, and enable us to do away with our present barbarous and unsatisfactory plan of plugging the nares—*British Med. Journal.*

ACUPRESSURE: WITH A DESCRIPTION OF A MODIFICATION.

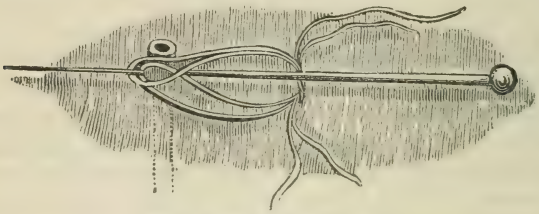
By J. C. Ogilvie Will, M. D.

Having attentively watched the progress of acupressure for nine years, during which period I have seen several thousand vessels acupressed, and having had ample opportunities of carefully comparing it with the various methods for arresting surgical hæmorrhage resuscitated or invented since Sir J. Y. Simpson's introduction of temporary metallic compression of cut vesaels, and having seen that the results obtained where acupressure has been used are infinitely superior to those where torsion, or silk, or carbolised catgut ligatures, aided by multifarious carbolised dressings, have been employed, I am naturally anxious to do anything to aid its advance. With this aim I purpose bringing before the profession a slight modification of acupressure, which will, I trust, from its simpilcity and evident security, find favour with such surgeons as are desirous of employing a hæmostatic which can be easily withdrawn when the period has arrived after which the presence of any foreign body in a wound, instead of adding to the patient's chances of recovery, must certainly militate against it.

Many surgeons, both British and foreign, have informed me that they entertained insuperable objections to the use of the wire in the method now called "circumclusion," on account of the danger of disturbing the clot, and also on account of the disturbance of the tissues caused by the "corkscrew" of wire during its withdrawal; they also stated that, as the other methods suggested did not seem to them to be sufficiently reliable, they did not feel warranted in giving up the use of the ligature in favour of acupressure.

To obviate this difficulty I now suggest, as a substitute for the wire, ligatures made of silk, well waxed and soaped, or catgut. The method of application will be easily understood by a glance at the accompanying engravings, assisted by the following short description.

Pass a pin underneath the vessel to be secured, making its point emerge a line or two on the other side of the artery; take two loops of ligature, place first one, then the other, over the point of

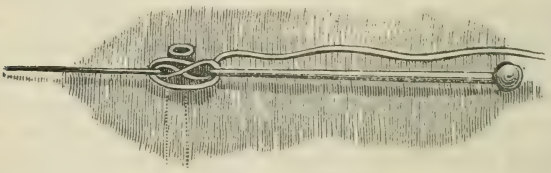


MODE OF APPLICATION.

the pin, bring them in front of the vessel, and tie by the usual surgical knot behind and a little to one side of the pin; lastly, cut off three ends, and bring out the remaining one by the side of the pin.

Two loops may seem unnecessary, but it is not so; for when only one is used, it takes such firm hold of the tissue about the vessel that, during its removal, the safety of the clot is endangered.

To withdraw: First remove the pin by a gentle twisting motion; after which, the knot being liberated, the ligature can be readily pulled out. I may here observe that the ligatures depicted in both sketches are rather more "rope like" than I intended; and in the second they appear to be less tightly drawn than would be desirable when in actual operation.



COMPLETED.

The advantages of this method are: 1, reliability; and, 2, the slight disturbance caused by the vessel and other parts during its removal. The only drawback to its use is the possibility of irritation being excited by the ligature; but as its sojourn in a wound would be of so short duration, such an objection could hardly be sustained. I would only advocate the use of filo-acupressure—if I may so call it—in the case of the larger vessels; retroclusion,

which Sir James Simpson often told me he considered the best of all modes when a pin alone was to be used, and, perhaps, torsoclusion, being employed for the smaller. I need only name these methods, as a full description of them may be found in an exhaustive paper on acupressure by Professor Pirrie in *The Lancet* June, 1871.—*Lancet.*

CASE OF LITHOTOMY, FATAL FROM EMBOLISM OF THE PULMONARY ARTERY.

By P. H. MacGillivray, A.M., Surgeon to the Bendigo Hospital.

Thomas S , aged 3½ years, was admitted to the hospital on the hospital on the 18th September. His father brought a note from medical man who had attended him, stating that he was suffering from stone, and he informed me that the symptoms had been present for two years. He was sounded the same afternoon, and a stone was readily struck.

Having arranged to operate on the 21st, a teaspoonful of castor oil was given the night before. This made him sick, and was repeated early in the morning. He was again very sick. At two the rectum was thoroughly cleared by an enema of warm water; and about half an hour before the operation a small qurntity of brandy and water was given. During the earlier part of the day he was feverish and much upset, seemingly from the castor oil; but at the time arranged for the operation he was much better, and there seemed no reason for postponing it.

The usual lateral operation was done. Some difficulty was experienced in getting the knife fairly lodged in the groove of the staff. The urethra at first cut very tough, so much so that the surgeon holding the staff remarked that he thought my knife must be blunt. As there was no escape of urine or distinct feeling of entering the bladder, the knife was run along quite to the end of the groove. The finger was then introduced, the stone at once felt, and the staff removed. The bladder was very large, and the stone rolled about so that it could not be extracted with the scoop which I first used. I then introduced a small pair of forceps, withdrawing my finger, when there was an immediate gush of urine. The stone was at once seized and extracted. A small piece of the outer layer broke off and was removed with the finger and scoop. The bladder was finally washed out. After the first introduction of the knife into the groove, there was no difficulty about the operation; and the hæmorrhage was very trifling.

After the operation, the patient progressed in all respects well. There was no sickness, and the urine soon commenced to escape

by the wound. At night the pulse was 130. As he was rather restless, he had a draught with three drops of tincture of opium. On the morning of the 22nd he was very well; pulse, 150; urine coming away freely. During the day nothing unusual was observed. He talked to me at my visit, and was all that could be desired. At the evening visit, at nine, everything was right. Afterwards, he became more restless, and another opiate (3 drops) was given at 1 a.m. He then fell asleep. He was well watched, but not disturbed, as he seemed sleeping quietly. Shortly before seven the attendant noticed that his appearance was changed, that he was pale, and breathing becoming very short and quick. When he spoke to him, he opened his eyes and recognised him. Mr. Penfold, the assistant-surgeon, was at once called, and found him dying. He thought at the time that the appearances were those of embolism. The lad died at half past seven.

The examination was made four hours after death. The operation wound was quite healthy. The rectum was uninjured. The urethra in front of the bladder was enormously dilated, and its walls thick. It had been opened for about an inch and a half by the knife. The neck of the bladder was very wide, readily admitting the finger. It was so wide that the knife, in running along the groove, had only divided the mucous membrane. The bladder was much hypertrophied. The ureters were greatly dilated, the right especially, being almost as large as the small intestine. There was some extravasation of blood about the neck of the bladder and a short distance up its left side. There was nothing about the parts concerned in the operation to in any way account for the death. On opening the chest numerous old, tough adhesions were found in the left pleura. Both lungs were congested posteriorly. The pericardium contained an unusual quantity of serum. The left auricle was filled with soft clot. The ventricle was empty. The right ventricle was filled with more consistent clot, extending into the pulmonary artery. The left pulmonary artery was tightly plugged, at its first division, by a firm, tough, fibrinous clot.

The stone was elliptical, smooth, long diameter 11-12ths of an inch, short diameter 9-12ths. It weighed one hundred and twenty grains.

This case is interesting in respect to the condition of the urinary organs, as revealed by the post-mortem examination, and as to the cause of death.

There can be no doubt that the dilatation of the urethra and neck of the bladder was caused by the stone being constantly forced forward by the childs straining in micturition, and that the hypertrophy of the bladder and dilatation of the ureters was

caused by its blocking up the urethra. When brought to the hospital the stone was in the bladder as it was at the time of the operation. The slight difficulty in exposing the groove of the staff seems to have been caused by the thick dilated urethra being pushed in folds against it.

The death from plugging of the pulmonary artery shows the necessity of carefully examining the heart and vessels when the cause of death from operation or injury is obscure. Of course no case is safe from such a contingency, and in this instance the lad progressed so favourably after the operation that there was no reason to anticipate any other than the usual favourable result of lithotomy in children.—*Australian Medical Journal.*

ANTISEPTIC INJECTIONS AND DRAINAGE TUBES IN EMPYEMA.

Edmund Andrews, M.D., Professor of Surgery in Chicago Medical College (*The Medical Examiner*, December 15, 1872), noting the great success of carbolic acid injections in arresting the purulent secretion, and consequent exhaustion and hectic of large abscesses, he determined to try it in a case of empyema, in which the patient had been stabbed in the back part of the left chest. The wound was closed, but effusion occurred, which became purulent, and discharged through a fistulous orifice, remaining after the tapping of the cavity. The opening was so small and crooked that his first effort to inject carbolated water into the fistula was unsuccessful. He then anæsthetized the patient and made a good-sized opening in the chest between the ribs where the fistula lay, and about a quart of pus gushed out. A piece of small rubber tube was inserted and tied in. Through this tube large injections of carbolated water, ten grains to the ounce, were freely thrown once a day. By this treatment the secretion of pus had been almost arrested: at the date of report, the patient was growing fat and vigorous, and was already able to take long walks. The cavity was quite small, and bid fair to be safely obliterated.

MEDICAL AND SURGICAL HISTORY OF THE WAR.

We beg to thank Surgeon-General Barnes, U. S. Army, for having sent to our address the first volumes of the Medical and Surgical History of the War of Rebellion. The Surgical History is a handsome volume, quarto size, and filled with valuable cases, fully and amply illustrated with wood engravings and coloured lithographs. The Medical volume contains reports of various epidemics which the army suffered from throughout the war, as also excellent maps. We will take an early opportunity of noticing this work more fully.

Medicine.

MEDICAL SOCIETY OF VICTORIA.

Dr. Day then read the following paper "On Ozonization of the Blood, as a Means of Preventing the Formation of Stone in the Bladder":

MR. PRESIDENT AND GENTLEMEN,—The theory I am about to submit for your consideration this evening will, if it be based on sound principles, place in our hands a much more powerful means of preventing the formation of urinary calculi than any we have hitherto possessed.

On the authority of Sir Henry Thompson, we are informed that nineteen out of twenty of the stones which are formed in the urinary passages, have uric acid for their basis; and, in all probability, the majority of such stones are primarily formed in the kidney, from whence, whilst small, they commonly escape into the bladder, where they may acquire a great size.

In Dr. Bence Jones' valuable lectures on "Pathology and Therapeutics" we find the peculiar diathesis which gives rise to uric acid deposits, classed among the diseases of suboxidation. He tells us that these are chemical diseases, some of which remain simply as such throughout their whole course—diabetes for instance—whilst others are followed by a secondary mechanical disease, and it is this secondary mechanical consequence of a primary chemical disease, which gives rise to so much suffering in the uric acid diathesis.

Dr. Jones says: "The relationship that exists between chemical disease and mechanical disease cannot be more clearly set forth than in the production of gravel or stone from errors in the chemistry of the body." Now, the error in chemistry which gives rise to the formation of uric acid gravel and stone, is imperfect oxidation of the effete tissues. In health, nearly the whole of the uric acid formed in the blood and textures is completely oxidized and converted into urea, carbonic acid and water; but when either uric acid is formed in excess, or imperfect oxygenation occurs, then this insoluble product is deposited; and thus to a primary chemical disease is added a secondary mechanical disease. The question, therefore, before us is, can we by any means render this uric acid soluble, and convert it into innocuous compounds, which may be readily eliminated from the system? I am disposed to believe that we can.

It has long been known that ozone acts chemically on uric acid,

oxidizing it, and rendering it soluble in water. My talented namesake Dr. Day, of Stafford, some years ago read a "Report on Ozone," at a meeting of the St Andrew's Medical Graduates Association, in which he says: "Ozone produces a rapid action on uric acid, causing it to be soluble in water. Upon being slowly evaporated yields yellow prismatic crystals, strongly resembling allantoin, and by a further evaporation of the water from which these crystals are obtained, a considerable quantity of urea may be procured." A very similar description of the action of ozone on uric acid is given in the last edition of "Carpenter's Principles of Human Physiology," and in most other modern works on physiology and chemistry.

Now, it seems to me that if we can bring this oxidizing and solvent property of ozone to bear on uric acid when it is abnormally present in the blood and textures, we shall become possessed of a powerful means of preventing the formation of lithic acid calculi.

For effecting this purpose the ozonic ether, or, to give it its proper name, etherial solution of peroxide of hydrogen, strongly recommends itself, both on chemical and physiological grounds, for it not only chemically acts on and dissolves the insoluble uric acid, but it also converts it into urea, the very substance into which it is converted by nature in the healthy body. The ether, by virtue of its high diffusive power, carries the peroxide of hydrogen rapidly into the circulation, where, on meeting with the blood globules, it is, by their catalytic action, transformed into ozone, which, having only a feeble affinity for the normal constituents of the blood, is free to act on uric act or any other substance which may be abnormally present.

You will naturally wish for some proof that peroxide of hydrogen really undergoes the change I have represented in the presence of blood, and I can easily show it to you.

One of the most characteristic reactions of ozone is its power of oxidizing guaiacum resin, and turning it blue. Here is a solution of permanganate of potash, which is known to contain ozone in a state which is readily set free. I will add a drop of tincture of guaiacum to a little of it, and you will at once observe a blue reaction. I will now add a drop of tincture of guaiacum to a little of the etherial solution of peroxide of hydrogen, which is known to contain active oxygen, but it is in the form of antozone—oxygen in the opposite polar state to ozone—and you will see that it is chemically indifferent to guaiacum, and produces no change in its colour. Neither does blood contain free ozone, for if it did it would blue guaiacum when added to it; it does not, however,

do so, as you may see; but on adding a drop or two of blood to a mixture of peroxide of hydrogen and tincture of guaiacum, a blue reaction at once takes place; thus showing that blood has the power of changing the condition of oxygen as it exists in peroxide of hydrogen, and giving it the properties of ozone.

I will now relate to you, as briefly as possible, the history of a patient who has been under the ozonic ether treatment during the last twelve months. He is a gentleman rather over 50 years of age, who has been a great sufferer from rheumatism, but whose health in other respects has been generally good, with the exception of a constant pain in the right kidney, which, when the new treatment was commenced, had lasted for more than a year, during which time he has been in the frequent habit of passing large quantities of uric acid gravel, sometimes in pieces of considerable size. His previous treatment, under my care, had consisted almost entirely in the occasional use of alkalies, and abstinence from sugar, pastry, beer, and wine. By these means the quantity of gravel passed with the urine was slightly diminished, but the improvement was not very marked.

The ozonic ether treatment was commenced in the early part of December last. It was given in doses of from half a drachm to a drachm, in a wineglassful of water, three times a day. In less than a fortnight the pain in the kidney had subsided, and there was an almost total absence of gravel in the urine. This treatment was continued for seven weeks, and then given up, the patient declaring himself to be perfectly well. Twice since that period the treatment has been resumed for a short time, in consequence of a slight return of the old symptoms. Although it has been my wish that he should still adhere strictly to the dietary scale originally prescribed, it has, I know, been very much disregarded. Indeed, I have constantly observed that, whilst taking the ozonic ether, he could drink ale and use sugar in moderation without their giving rise to the slightest apparent change in his urine, but on discontinuing the remedy whilst still taking the ale and sugar, the gravel quickly re-appeared in his urine.

I will conclude by suggesting that probably the debris left in the bladder after the operation of lithotrity, might be dissolved by weak injections of the watery solution of peroxide of hydrogen. Pus, which is probably always present in the bladder after this operation, having, like blood, the property of transforming the antozone of peroxide of hydrogen into ozone.—*Australian Medical Journal.*

THE LYMPHATICS OF THE SKIN.

Dr. Neumann, of Vienna, has been making a careful study of the lymphatic system in the skin, and has arrived at the following conclusions:

1. The lymphatics of the skin may be regarded as a system of closed tubes, whose walls are independent of the surrounding tissues, and are lined internally with flattened epithelium; these tubes have no orifices whatever, and consequently do not communicate with the so-called serous canaliculi, or any other similar network in the interstices; no openings exist between the epithelial cells, not even when the vessels have undergone pathological changes.

2. Of the blood and lymphatic capillaries, the former are always nearest the surface of the skin; in the deeper parts of the cutis, the branches and networks of each system intercalate with one another in an intricate way. No invagination of one lymphatic vessel within another was observed.

3. In the two series of lymphatic networks that exist in the cutis, the deeper one is made up of broader and stouter vessels. No valves or stomata are found in this situation, though in subcutaneous tissues they occur occasionally. Lymphatic tubes or loops are supplied to the papillæ.

4. The sweat-glands, hair-roots, and follicles are furnished with lymphatic capillaries. The fat lobules are similarly provided.

5. The distribution of the lymphatics varies in the different parts of the body. They are most numerous in the labia majora, scrotum, palms of the hands and soles of the feet.

6. Sometimes dilatation of these vessels is observed in parts that have undergone pathological change.

7. In ulcerative processes, when lymphatics are destroyed, they may be regenerated; when observed in cicatrical tissue, they are diminished in size.—*The Medical Record.*

CASE OF DISSECTING RUPTURE OF THE HEART.

By J. Higham Hill, F.R.C.S., Medical Officer of St. Pancras Workhouse.

The pathological interest of the following case induces me to place it upon record.

S. G. aged 65, a woman of spare habit of body, was on December 6th, while in her usual health, suddenly seized with an acute pain in the region of the heart, followed by considerable dyspnœa and vomiting. She was removed to bed, and my attention was called to her. I found her slightly collapsed, with cold extremi-

ties, breathing with difficulty and inclined to vomit. She still complained of pain in the region of the heart. On examination, I found that the cardiac action was irregular and very weak; there was, however, no murmur. She was ordered to have some brandy and Seltzer water, also a mustard-plaster over the heart, and a hot-water bottle to her feet. Under this treatment she rallied considerably; her circulation improved, and the dyspnœa, sickness, and pain were relieved. She continued in this apparently improved condition for about twenty four hours, when death suddenly took place, consciousness having been retained to the last.

On making a post-mortem examination, the pericardium was found to be full of blood, which was discovered to have escaped from the interior of the heart through a small rapture in the right auricle. The left side of the heart was considerably hypertrophied, the right side much atrophied, and the cardiac tissue generally in a state of fatty degeneration. There was no valvular disease present.

The chief point of interest in the case is, that the blood, in escaping, had not made a direct passage through the wall of the auricle, but, having broken through the endocardium and a portion of the degenerated muscular structure, had then dissected the wall of the heart for a considerable distance around into two distinct layers, and finally had broken through the outer layer into the cavity of the pericardium. Both openings were small—the external one being two inches nearer the superior vena cava than the internal one. The interspace made by this dissecting process in the wall of the heart was filled with a layer of quite recently coagulated blood. The lungs were healthy, but the liver and kidneys were in a state of fatty degeneration.—*British Med. Journal.*

OBESITY A CAUSE OF DISEASES OF THE FEMALE SEXUAL ORGANS.

According to H. Kirsch, of Prague (*Centralbl. f. d. Med. Wis.*, No. 34), diseases of the sexual organs in women are not unfrequently dependent upon the presence of an abnormal amount of adipose tissue. He bases his assertion upon the examination of 214 stout women. Of these, irregularity in the menstrual function presented itself in 208; and of these, 146 had leucorrhœa, 116 complained of scanty menstruation, and 56 of chronic metritis; 47 suffered from hysteria; 48 were sterile; 39 exhibited anteflexion and anteversion of the womb, and 11 retroflexion. The writer avers that most of these affections improve without further treatment when the obesity has been made to disappear. A course of diet somewhat like that advocated by Banting, combined with a moderate use of the waters of Carlsbad and Marienbad, is recommended.

CANADA

Medical and Surgical Journal.

MONTREAL, MAY, 1873.

THE REGISTRATION BILL.

We observe that a bill has been introduced before the Commons of Canada "to provide for the registration of marriages, births, and deaths, and for the collection and publication of Statistics." We regard this as the beginning of a new era for our country, and, if the Act, when it becomes law, is judiciously worked it will, without doubt, be of the greatest benefit. Some years since we endeavoured to arrive at some definite conclusions regarding the mortality of our country, but found that inasmuch as there was no system of registration which was in any way reliable we were unable to get anything positive, and, in consequence, relinquished the task. Hitherto a register has been kept by the clergy, but it is not correct; errors will creep in, even when the greatest care is employed to avoid them. A general registration law should be, entirely under government control, but it need not in any way prevent the exercise of the customary religious rites practised by all denominations. With many these ceremonies are regarded by believers as a matter of faith, and, therefore, cannot be interfered with; at least no law, however stringent or well administered, can supersede the carrying out of acts of faith by the people: nor is it expedient that a registration Act should possess such a tendency. In desiring, therefore, to see, which we do, the introduction of an Act which will be in its operation a civil Act, we do not in any way counsel the interference with any religious ceremony. The religious belief of the people is a matter with which the government has nothing whatever to do. The first principle of British independence is equal rights secured to all, be he prince or beggar; rights which are indisputable, and which cannot be meddled with so long as they do not contravene the law which, in the wisdom of the law-givers, is adopted for the general weal. The clergy, therefore, need not imagine that, in the introduction of a Registration Act, their customary privileges are in any way assailed. Indeed, in many parts of the country the government will be forced to seek the assist-

ance of the clergy, because, possibly, the clergyman may be the only person who would be likely to give the required information with anything like reliability.

There is one clause in the bill as submitted which, we think, requires careful consideration. We copy it in full so that there may be no misunderstanding as to our meaning. At section five it is stated: "5. Under the authority of this Act there shall be "established and carried into effect a system of registration of "marriages, births, and deaths throughout Canada, and a system "of collecting, compiling, tabulating, and publishing agricultural, "industrial, and other statistics." We cannot see what benefit is to accrue by combining the agricultural statistics with those purely vital. The latter should be separate and distinct from the former. The growth and produce of the country is of great importance. No doubt it is very necessary to show the gradual and steady increase in wealth, and the agricultural facilities of any country; for if a country cannot show a probable chance for yielding support to increased numbers in population it cannot hold out inducements in favour of emigration. But it must be admitted that unless it can be shown that emigrants, when they land, will be under as favourable salubrious conditions as they were in their own native country, they will not emigrate. These statistics appear to go together, but we fear that embracing to large an area will do more harm than good and lead to serious errors.

There is another point we would draw attention to, as it seems very odd; clause twenty-five states: "Every clergyman, every "medical practitioner, every representative of an institution, of "a corporation or company, who shall furnish to a Registrar the "information contained in sections thirteen, fourteen, and fifteen, "of this Act shall receive for each such detailed information, dictated or given in writing with attestation, to the satisfaction of "the Registrar of the subdivision concerned, and upon the certificate of the Superintendent Registrar of the division a fee of "*ten cents*." Now, we think that this information should be compulsory, with a penalty attached for neglecting to give the required information.

Again, in the case of burials, it should be enacted that no keeper of a burial ground should, under any circumstance whatever, permit the interment of any body recently dead unless there is a certificate touching the cause of death, from a regularly licensed medical practitioner; failing such the coroner of the district should be compelled to hold an inquest; or, in other words, that no dead body should be permitted to be interred in any cemetery or burial ground except on the certificate of a regularly licensed medical practitioner, or on a coroner's order.

THE ONTARIO COLLEGE AND THEIR DIPLOMA.

In the last number of this journal we stated that many of the candidates who had passed the examinations of the College of Physicians and Surgeons of Ontario, and whose names appear as licentiates in the lists published by the College, did not possess a single document in the form of a diploma or other certificate in proof of their having submitted to the required tests. The article was copied in full by the Montreal *Gazette* and elicited the following letter in reply:

THE ONTARIO COLLEGE.

To the Editor of the Montreal Gazette:

Sir,—Permit me to state that each Licentiate of the College of Physicians and Surgeons of Ontario receives a printed Certificate of Registration from the Registrar of the College, and since the beginning of 1872 a handsome Diploma on parchment.

Yours respectfully,

L. C. P. & S. Ontario.

Montreal, April 15th, 1873.

It is not always wise to notice an anonymous communication. If a man fails to put his name to a document which he publishes, and which possesses public interest, the inference to be drawn is that he is not quite certain of the premises on which he grounds his argument. In this instance the assertion is dogmatic, giving the lie direct to what we had stated in our article. It is unsupported by proof of any kind. We presume the author has some positive evidence to offer; he may be one of the favoured few who has been decorated with a Diploma of the College of Physicians and Surgeons of Ontario. We possess evidence which is indisputable, of the correctness of our allegations. We showed it to the Editor of *The Gazette*, and he opened his columns to us; we preferred, however, to confine our remarks to our own periodical. We give below some few extracts of letters in our possession. For instance, one gentleman who passed his Final examination in April, 1872, in writing to us states that he was informed by the President of the College that he had passed, but "up to this date (17th April, 1873) I have not received a Diploma of any description." Another gentleman who passed this year, and whose name was published among the successful candidates, states: "I was informed I had passed by the President of the Board, but have not got anything to show for it. I suppose if I had asked the Registrar I might have got some sorry certificate. I heard that he gives a paper one for the asking, and if we pay five dollars we get a parchment certificate. As to a Diploma I do not

know of any any one who has got one." Another gentleman, writing to us under date 28th April, 1873, states: "Friday's *Globe* contains a list of those who passed the examination. I expect to receive some personal satisfaction on the subject. When it comes I shall let you know whether it is on parchment or paper."

These we deem sufficient for the purpose, and are satisfactory proof of the correctness of our statements. It is painful to have to call attention to these irregularities of a corporate body holding such an important legislative trust. We do not wish to oppose factiously the Ontario Medical Act, but we are desirous of seeing that Act fairly and honourably administered. When the Act was first introduced we did oppose the amalgamation scheme, and still we regard that portion of it as a great blunder. It is certainly humiliating to know that the profession to which we belong, and which we revere for the scientific truths which it unfolds, has, in one section of our country, been degraded, lowered, dragged through filth, and abundantly bespattered by ignorance and charlatanism. If we have written warmly we have done so honestly. No good can come of this measure. It is an act of abasement perpetrated by men whom we are bound to consider honest, but who lacked self-confidence. To justify themselves before the profession they point to the fact that no Eclectic or Homœopathic candidates have presented themselves for examination since the passing of the Act. But this has not prevented Eclectics and Homœopaths, who are unlicensed, from practising through the country. As we have elsewhere stated, no good can possibly accrue from such an unholy alliance, and the result has been just what might have been expected. The College has been associated with persons not commonly honest, and we fear that this evil communication has corrupted its good manners. We know and are sure that the majority of the men composing the Medical Council are honourable, high-minded gentlemen; yet we fear that a feeling of shame must have been experienced by some, at least, of those gentlemen, for that the irregularities connected with the management of the College have called forth public censure.

We hope that the Medical Council, at its next annual gathering, will fearlessly look into these matters and freely apply the pruning-knife wherever rottenness or incompetency exists. If this is done, and matters placed on a different footing, then, indeed, will the College take a firm stand in the right direction, and it will do that which is calculated to secure the confidence and co-operation of the profession generally. Without it, if the same condition as exists to-day is allowed to continue it cannot reasonably look for that support which, we fear, is sadly wanting at present.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO —SESSION 1873.

RULES.

1. In all the subjects of examination, each candidate must write down all the questions as they are dictated by the several Examiners.

2. The answers are to be written upon one side only of whole sheets of paper, which are to be paged and fastened together in order, by means of paper fasteners, at the top left-hand corner, in such a manner as to have the first page facing outwards to the view; they are then to be folded neatly and enclosed in an envelope, on the outside of which each candidate is to write his name, and hand it to the Registrar or some one deputed by him to receive it. Neither signature, number nor sign is to be written or marked upon any of the sheets enclosed in said envelope.

3 In using abbreviations candidates will take care to use only those which are generally understood, or which cannot be mistaken.

4. No candidate will be allowed to leave the hall after the questions are given out, until his answers have been handed in.

5. No candidate will be allowed in the hall during the hours of examination, except those actually undergoing examination.

6. Any Candidate who has brought any book or reference paper to the hall must deposit the same with the Examiner immediately befose the commencement of the examination.

7. Candidates must not communicate with each other while examinations are going on, either by writing, signs or words.

8. Any infringement of the above rules will lead to the exclusion of the person who is guilty from the remainder of the examinations.

By order,

THOMAS PYNE, *Registrar.*

DAYS AND SUBJECTS OF EXAMINATION.

EXAMINATION PAPERS—PRIMARY BRANCHES.

WEDNESDAY, April 2nd, 9 to 10 a.m.—*Materia Medica and Therapeutics.*—Dr. Fulton.

1. Name the natural order of plants to which colocynth belongs, and give the composition of its principal officinal preparations?

2. What are the contra-indications to the use of opium? Give the principal alkaloids obtained from it; their doses and modes of administration?

3. Give the formula, mode of preparation, use, and ordinary dose of each of the following: chloroform, iodide of potassium, acetate of lead and strychnine?

4. Under what circumstances would you prefer a direct to an indirect emetic? State your reasons for that preference?

WEDNESDAY, April 2nd, 3 to 5 p.m.—*Physiology.*—Dr. Lizars.

1. What are the functions of the foramen ovale in the fœtus, and the results of its non-closure after birth?

2. What is the use of the cerebro-spinal fluid?

3. Describe the different kinds of muscle and their nervous supply?

THURSDAY, April 3rd, 9 to 11 a.m.—*Theoretical Chemistry.*—Dr. Sangster.

1. Explain the meaning of the terms "latent heat," "specific heat," and the "mechanical equivalent of heat"?

2. Describe the different compounds of S. with O., H. and C., giving the name, formula, molecular weight, preparation and properties of each?

3. Describe the compounds of As. with O., H. & S., as in 2nd?

4. Give the formula and molecular weight, and briefly describe the preparation of the following, viz., bromine, calomel, Scheele's green, vermilion, acetic, oxalic and carbolic acids?

5. Give the formula of the sucroses, glucoses and amyloses? Describe the preparation and composition of dextrine and gun-cotton?

6. Give a brief synopsis of the chemistry of milk?

FRIDAY, April 4th, 9 to 11 a.m.—*Descriptive Anatomy.*—Dr. Sullivan.

1. How would you remove the spinal cord for examination? At what vertebra does it begin, and where does it end? How it it retained in position? Describe the roots of the nerves; their difference and place of union?

2. Give the course of the large intestine, the relations of the rectum, and name the vessels and nerves supplying the latter?

3. Trace the superior longitudinal and lateral sinuses from the commencement to the point of termination, naming the bones grooved by them?

4. Describe the formation and course of the superior vena cava and greater azygos veins?

5. In the dissection of the neck, where do you see the first

branches of the cervical plexus? What nerves form it? Trace the longest branch, giving course and termination?

6. How would you expose the internal oblique? also the muscles passing round the external malleolus? Give their attachments?

7. Where does the radial artery pass into the hand? Give its course thence to its termination, and name the two largest branches given off in the hand?

8. What parts pass through the parotid gland? Give the general distribution of those parts?

FRIDAY, April 4th, 4 to 5 p.m.—*Toxicology.*—Dr. Tuck.

1. Name the principal narcotic poisons? Describe the symptoms produced by them and give treatment to be adopted?

2. Contrast the symptoms produced by narcotic poisons with those of natural disease?

3. Describe the symptoms and treatment of poisoning by corrosive sublimate and oxalic acid?

4. Describe the mode of detecting, in organized tissues, the presence of arsenic or corrosive sublimate?

SATURDAY, April 5th, 10 to 11 a.m.—*Botany.*—Dr. Morrison.

1. Describe the elementary vegetable cell?

2. Give two definitions of a flower, one as regards its structure, the other as regards its function, and describe fully the structure and function of the anther, pollen and stigma?

3. What organs or parts of a plant afford characteristics of the greatest importance? State the difference between a natural and artificial system in botany?

4. What is transpiration? How determined?

5. Describe the reproductive organs in mosses and ferns?

6. What are the histological characters and mode of production of cork, starch and vegetable ivory?

7. Explain the nature of carbonic acid and ammonia to the nutrition of plants, and describe the effects of growing plants on the atmosphere?

8. To what order does each of the following plants belong: aquilegia canadensis, cypripedium pubescens, aconitum napellus, arnica montanum and veratrum viride?

EXAMINATION PAPERS—FINAL BRANCHES.

TUESDAY, April 1st, 2 to 4 p.m.—*Medicine and Medical Pathology.*—Dr. Wright.

1. Give definition of dropsy, its causes, treatment and pathology.

2. Symptoms, pathology and treatment of scarlet fever?

3. What pathological conditions produce colic; varieties of the disease, diagnosis, prognosis and treatment?

4. What are the characteristic symptoms of delirium; in what diseases apart from mania does it occur; what are the pathological conditions giving rise to it, and how are these distinguished and treated?

5. What are the phenomena of pseudomembranous croup, its morbid anatomy and treatment?

TUESDAY, April 1st, 4:30 to 5:30 p.m.—*Medical Diagnosis.*—Dr. Strange.

1. Symptoms of epilepsy, and how do you distinguish the actual from the feigned disease?

2. Describe the points of resemblance between chronic bronchitis and phthisis; also, means to diagnose one from the other?

3. What affections are liable to be mistaken for the hæmoptysis of phthisis, and how would you distinguish between them?

4. Give the symptoms of pericarditis?

5. Give the symptoms of cerebro spinal fever?

6. Give the symptoms of inflammatory croup, acute laryngitis and diphtheria; give the distinguishing characteristics of each?

WEDNESDAY, April 2nd, 11 a.m. to 1 p.m.—*Surgery.*—Dr. Canniffe.

1. Mention the products of inflammation; what are the characteristics of pus, its constituents, how formed, and what are the changes it may undergo in the process of elimination?

2. Give the classification of wounds, and state how you would recognize a bullet wound: what are the indications for treatment of gun-shot wounds, and what are the complications which may arise and which should be guarded against?

3. What are the surgical diseases which affect bones, and what is the difference between caries and necrosis, give causes of each disease and their proper treatment?

4. Give the difference between concussion and compression of the brain, and the diagnostic symptoms of each affection, and the treatment of each?

5. State the danger of penetrating wounds of the chest, how you would know whether the pleural cavity had been opened or the lungs wounded, and give the proper treatment in each kind of chest wound?

6. Give the causes, symptoms, pathology and different modes of treatment of a popliteal aneurism?

THURSDAY, April 3rd, 11:30 a.m. to 12:30 p.m.—*Practical Chemistry.*—Dr. Sangster.

1. Describe the purification of the different reagents required to test for arsenic?

2. How would you determine the presence, in urine, of bile, albumen, fat or chyle?

3. A metallic solution is not precipitated by HCL or H^2S in succession, but after addition of ammonia chloride and neutralization by NH^3 a precipitate is formed by adding ammonium sulphide; what metal may be present, and in each case what would be the colour of the precipitates?

4. How would you determine the presence of oxalic acid in an organic mixture?

5. How would you examine a urinary calculus and determine its composition?

THURSDAY, April 3rd, 2:30 to 4:30 p.m.—*Midwifery.*

1. What changes take place in the uterus during pregnancy?

2. Describe puerperal peritonitis, giving its common causes, symptoms and treatment?

3. How would you diagnose accidental from unavoidable hæmorrhage, and what treatment is recommended in cases of the latter?

4. Mention the several disorders of menstruation; give the varieties of amenorrhœa and the treatment of it?

5. Give the necessary steps to be taken to affect delivery in cases of arm presentation?

6. When are forceps necessary; under what precautions?

FRIDAY, April 4th, 11:30 a.m. to 12:30 p.m.—*Surgical Anatomy.*—Dr. Sullivan.

1. What muscles cause the deformity in fracture of the cervix femoris within the capsule?

2. What parts would you divide in cutting down on the subclavian artery in the third part of its course?

3. Give the relations of the thyroid gland and nerves and blood vessels supplying it?

4. What tissues are divided in resection of the shoulder joint, and what vessels and nerves are in close proximity to the incision?

5. Beginning externally, name the parts passing below Paipart's ligament and those passing under the posterior annular ligament of the wrist?

FRIDAY, April 4th, 2 to 3:30 p.m.—*Medical Jurisprudence.*—Dr. Campbell.

1. State the conditions under which alone dying declarations are admissable?

2. Wherein do the medical and medico-legal definitions of a wound differ?

3. Give the probable characteristics of medical, homicidal and accidental gunshot wounds?

3. By what circumstances would you say that drowning was the result of suicide, homicide or accident?

5. Describe the post-mortem appearances which are usual in death by lightning?

6. What medico-legal inferences may be drawn from corpora-lutea and their different appearances?

7. Define infanticide and give best means of establishing that the crime has been committed?

8. Describe the varieties of insanity?

9. Under what circumstances are doctors liable to damages in signing certificates of insanity?

10. How far does suicide render void a policy of life insurance?

SATURDAY, April 5th, 9 to 10 p.m.—*Surgical Pathology.*

1. Describe the ulcerating process in the solution of ulcerating parts?

2. Describe the two modes of development of fibro-cellular tissue for the repair of wounds?

3. Give the distinction of specific from common diseases?

4. Explain symetrical diseases. *In reference to the formative process what is proven by the phenomenon of symetrical diseases?*

5. Describe the reparative process in cases of fracture?

SATURDAR, April 5th, 11:30 a.m. to 12 m.—*Sanitary Science.*—Dr. Fulton.

1. What substances suspended in an impure supply of water are likely to produce outbreaks of diarrhœa and typhoid fever, and what on examination are the principal evidences of such injurious matter?

2. To what cause has the prevalence of goitre in certain localities been attributed?

3. Describe the extent to which the air is likely to be affected by the decomposition of bodies where intramural interments obtain, and state the evils to which a crowded population in the immediate vicinity of a cemetery would be liable?

4. What are regarded as the causes of hospital erysipelas, and what course should be adopted to limit its transmission?

5. Mention the various methods of removing sewage; indicate the best, and state the influence the construction of sewers has had on the death rate of towns?

6. State the action of water on lead-pipes commonly used in cities to supply water to houses, the amount of lead in solution deemed innocuous and the amount considered dangerous, and specify the best means to protect water and to ensure safety to consumers?

7. What prophylactic measures should be enjoined to protect from cholera, and when the disease does occur, what steps should be taken to lessen its spread?

MONDAY, April 7th.

The Oral Examinations will begin to-day at 2 p.m., and continue at the discretion of the Board till concluded.

The following gentlemen passed successfully the College Examinations:

Primary.—H. N. Beemer, N. Brewster, W. Brock, A. J. Campbell, K. H. Cameron, C. East, D. Fraser, D. B. Fraser, J. Golden, S. D. Hagle, W. T. Harris, L. D. Healy, L. J. Lennox, W. H. Lowry, C. S. Moore, N. W. Meldrum, A. McLaren, P. McLean, J. L. McDiarmid, G. Smith, and G. Shaw.

Final.—D. O. Alguire, M. I. Beeman, N. Brewster, O. C. Edwards, S. A. Ellison, C. East, E. A. Gaviller, J. Golden, S. D. Hagle, A. J. Johnson, F. W. Jackson, E. G. Kittson, H. Lang, H. T. Machell, C. S. Murray, N. W. Meldrum, A. Nichol, C. A. Paterson, J. A. Stevenson, A. H. Wright, and R. C. Young.

PANCREATINE AND PANCREATIC EMULSION.

The use of these well-known preparations is too extensive to need, at our hands, any extended commentary. We have before alluded to the preparations of Messrs. Savory & Moore, Operative Chemists of New Bond street, London, and feel it a pleasurable duty to again remind our readers—such of them, at least, as require such a reminder—that the subscribers still continue to make their preparations with the same care and accuracy as heretofore. They must be coming into very general use by the profession when we are able to state that several thousand cases are annually consumed in Canada. Of their advantages in wasting diseases generally, indigestion, and in some cases of phthisis, there can be no second opinion.

DR. COLLIN C. SEWELL.

At the regular fortnightly meeting of the Medico-Chirurgical Society, held on the 18th instant, the following resolutions were unanimously carried:

Moved by Dr. F. W. Campbell, seconded by Dr. G. E. Fenwick, "That this Society has learned with sincere regret the approaching departure from Montreal of their fellow-member, Dr. Colin C. Sewell. They desire to place upon record their estimation of his gentlemanly qualities and high professional abilities, and at the same time to express their sympathy with the cause which compels him to leave Montreal and the professional success that awaited him here."

Moved by Dr. Reddy, seconded by Dr. Roddick, "That Dr. Sewell be elected a Corresponding Member of this Society."

The Secretary was instructed to forward a copy of the above resolutions to Dr. Sewell.

The cause of this move on the part of our esteemed friend is, we regret to say, the continued and somewhat alarming indisposition of Mrs. Sewell. His intention is to join his family in England, and thence proceed to Australia by way of the Cape, in the hope that the protracted sea-voyage may do much towards his wife's restoration to health. With all our heart we wish Dr. and Mrs. Sewell all imaginable happiness and prosperity.

DIARRHŒA IN TEETHING.

In a clinical lecture "On the Primary Dentition of Children," by Francis Minot, M.D., Harvard (*Boston Medical and Surgical Journal*, January 2, 1873), in speaking of the diarrhœa complicating teething during hot weather, recommends the common chalk mixture, with the addition of one-fourth part of tincture of kino, which increases its astringency, and also keeps it from turning sour in hot weather. If the diarrhœa be not stopped by this mixture, one drop of laudanum may be added to a dose, but not oftener than three times a day, in children under two years old. Diarrhœa is most apt to attack children who are brought up on the bottle; hence, if the case be urgent and does not yield to treatment, a wet nurse should be procured if possible. When this cannot be done, he would strongly recommend the method of preparing the milk with arrow-root and gelatine, found in the treatise on "Diseases of Children," by Dr. Meigs and Pepper. Brandy is very useful to a teething child exhausted by diarrhœa, which should be given once in three or four hours, or oftener in urgent cases. The dose is ordinarily from five to twenty-five drops, given in milk; but if there be much prostration the physician need not fear to increase the amount.

CANADA

MEDICAL AND SURGICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

What is Insanity? By Mr. Thos. D. King.

"I have some of them in Limbo Patrum, and there they are likely to dance these three days."—*King Henry VIII.*, Act 1, Scene 3.

Plato says: "Everybody that is moved from without is soulless, but that which is moved from within of itself possesses a soul, since this is the very nature of soul." And so says Bacon: "All spirits and souls of men come forth out of one divine limbus."

If it is difficult to draw the line of demarkation between the vegetable and animal kingdoms it is also difficult to determine where folly ends and insanity begins, and, also, to make the line of division between instinct and intelligence. There are a large class of minute cell-like bodies about which our best microscopists differ in opinion. There is yet a doubt whether they belong to the animal or vegetable kingdom. Ehrenberg, even with the aid of the best microscopes, could not determine whether these minute organisms are to be classed with animals or plants. Their apparently voluntary motion is not sufficient to settle the question. Dr. Lankester resolves the essential organic difference between the two kingdoms into a difference of merely chemical operations. The fly-catching movement of the leaf of Dionæa, or the vibrating motion of the leaflet of Hydesarum, or the life-like motion of the sensitive Mimosa, is a mere result of organization and of the action of external or internal physical forces, or both together, though Schleiden* cannot, with the microscope, discover the causes. Some very able palœontologists doubt the foramineforous structure of the "Eozoon Canadense."

The phrenologists assume a whole psychology, wherein the human mind appears to be an agglomeration of some forty distinct faculties and powers within the skull. The psychologists say that sensation, ideation, and consciousness, lie in the "sensorium" in

* Schleiden's Principles of Botany, p. 554, (London, 1849).

the sensory ganglia, and discover "internal senses" in the commisural fibres, and place the will and intelligence in the cortical substance of the cerebral hemispheres.

Others daringly attempt to define the seat of the mind or soul, perhaps as great a piece of folly, or presumption, or madness, as to try and find out by thought alone the nature of the Almighty; or whether he existed before time, or had Himself a beginning. Again, others will maintain that our earth is the only inhabited world in the universe, while some try to make us believe that the planets and stars are worlds with life, and are inhabited by rational and immortal beings.

Some divide the causes and symptoms of insanity into physical and moral, or bodily and mental. Physicians, jurists, and critics have expended much labour and ingenuity about the insanity of Hamlet—an ideal character—and are at variance whether his madness is real or simulated. Some of the arguments upon both sides are plausible and obvious, others absurdly fanciful and far-fetched, as much so as those of the sceptics, or lunatics, who endeavour to make us believe that Pisistratus compiled the Iliad and the Odyssey, and that Francis Bacon, Lord Verulam, is the author of the plays of Hamlet and Lear, and that his profound dramatic genius produced such characters as Lady Macbeth, Ophelia and Edgar, the poor *Tom O'Bedlam.*

The arguers upon both sides of a question, with their metaphysical dogmas, pathological and physiological deductions, who apply principles and display the slightest bias in the application of them, may each repel the idea of being mad, and may be ready to exclaim after the exposition of some startling theory or original idea:

> "It is not madness
> That I have utter'd: bring me to the test,
> And I the matter will reword; which madness
> Would gambol from."

The man who believes that

> "Each of *the* stars is a religious house,
> And *sees* their altars smoke, their incense rise,
> And *hears* hosannas ring through every sphere,"

will have some non-believer in the "Plurality of Worlds" saying to him:

> —— "to deal plainly,
> I fear *thou art* not in *thy* perfect mind."

There is an excellent story told of Hannibal, with which, doubtless, every reader of this journal is acquainted. It is this:—When an exile at a foreign court he was invited to attend a lecture: but

when asked, at the end of the performance, by one of the admiring audience what he thought of it, with characteristic bluntness he replied "that it had been his lot in the course of his life, to meet with many old dotards, but never one who so fully deserved that title as the man who had just dared to lecture upon the art of war in the presence of Hannibal." It is probable that the writer may be considered either mad or a dotard to venture to express a thought upon the subject of insanity, because if he was asked to define true madness he would only be able to answer, in the words of Polonius:

> "What is't, *but to be nothing else but mad:*
> But let that go;"

and judging from the definitions of insanity given by some physicians and jurists, whose thoughts upon the subject are

> "Combinations of disjointed things,"

it is evident that they are not much more explicit, and that they have much to learn on the subject of mental derangement, and that their knowledge of insanity has not kept pace with their knowledge of other distempers. Some are content to say that the poor patient

> "Fell into sadness; thence into a fast;
> Thence to a watch; thence into a weakness;
> Thence to a lightness; and, by this declension,
> Into the madness wherein now he raves,
> And we all mourn for."

The writer considers that there is a great difference between what is generally understood by the word insanity and the nervous or melancholy disorders, the excess of which is so often confounded with it. Insanity may be traced to a malformation of the brain, not to an excess of brain, and is by no means of necessity attended with melancholy and ill-health. The patient in the very midst of it is often strong, healthy, and even cheerful. On the other hand, nervous disorders, or even melancholy in its most aggravated form, is nothing but the excess of a state of stomach and blood, extremely common. "An enemy may be put into the mouth to steal away the brains." The mind, no doubt, will act upon that state, and exasperate it; but there is great reaction between mind and body; and as it is a common thing for a man in an ordinary fever, or fit of the bile, or acute dyspepsia, to be melan-

choly, and even to do and feel inclined to do an extravagant thing, so it is as common for him to get well and be quite cheerful again;

> "And thus a-while the fit will work on him;
> Anon, as patient as the female dove,
> When that her golden couplets are disclos'd,
> His silence will sit drooping."

Thus it is among witless people that the true insanity will be found. It is the more intelligent that are subject to the other disorders, and a proper use of their intelligence will show them what the disorders are.

But weak treatment may frighten the intelligent. A kind person, for instance, in a fit of melancholy, may confess that he feels an inclination to do some desperate or even cruel thing. This is often treated at once as insanity, instead of an excess of the kind just mentioned; and the person seeing he is thought mad, begins to think himself so, and at last acts as if he were. This is a lamentable evil; but it does not stop here. The children or other relatives of the person may become victims to the mistake. They think there is madness, as the phrase is, "in the family," and so whenever they feel ill or meet with a misfortune, and get what is commonly called a "fit of the blues," the thought will prey upon their minds; and this may lead to catastrophes with which they have really no more to do than any other sick or unfortunate people. How many persons have committed an extravagance, done some more than eccentric thing in a brain fever, or undergone hallucinations of mind in consequence of getting an ague, or taking opium or morphine, or fifty other causes; and yet the moment the least wandering of mind is observed in them, others become frightened; their fright is manifested beyond all necessity; and the patients and their family must suffer for it. They seem to think that no disorder can properly be held a true Christian sickness, and fit for charitable interpretation, but where the patient has gone regularly to bed, and had caudle-cups, and water-gruel, and nurses about him, like a well-behaved respectable sick gentleman, and has had a litany said for him in common with all others afflicted in mind, body, or estate. But this state of things implies muscular weakness, or weakness of that sort which renders the bodily action feeble. Now, in nervous disorders the muscular action may be as strong as ever; and people may reasonably be allowed a world of illness, sitting in their arm-chairs, or even walking or running.

These mistaken pronouncers upon disease ought to be told, that when they are thus unwarrantably frightened, they are partaking

of the very essence of what they misapprehend; for it is *fear*, in all its various degrees and modifications, which is at the bottom of nervousness and melancholy; not fear in its ordinary sense, as opposed to cowardice, but imaginative fear.

Macbeth says:

> "I am afraid to think what I have done;
> Look on't again I dare not."

Again:

> "How is't when every noise appals me?"

And yet he, in another place, says:

> "What man dare, I dare:
> Approach thou, like the rugged Russian bear,
> The arm'd rhinoceros, or the Hyrcan tiger;
> Take any shape but that, and my firm nerves
> Shall never tremble."

With this melancholy there is sometimes either a fear of something known, or the patient knows not what:—a vague sense of terror,—an impulse,—an apprehension of ill,—dwelling upon some painful, and worrying, and terrible thought. Hundreds will be found to have felt it, if the patients inquire; but the mind is sometimes afraid of acknowledging its apprehensions even to itself, and thus fear broods over fear and hatches fear.

These sufferings and imaginings are often connected with a weak state of the body in some respects, particularly of the stomach. Sometimes melancholy is produced for want of exercise, and long-continued confinement, and want of proper and sufficient food.

Shakspeare says:

> ——— "Abstinence engenders maladies,
> And universal plodding prisons up
> The nimble spirits of the arteries.
> Sweet recreation barr'd, what doth ensue
> But moody and dull melancholy
> Kinsman to grim and comfortless despair,
> And at her heels a huge infectious troop
> Of pale distemperatures and foes to life?
> In food, in sport, and life-preserving rest
> To be disturbed, would *mad* or man or beast."

Insanity itself, perhaps, properly means but unhealthiness or unsoundness. Melancholy is composed of two words, which signify dark bile. Hypochondria is the name of one of the regions of the stomach—a very instructive etymology. And lunacy refers to effects, real or imaginary, of particular states of the moon, which, if anything after all, are nothing more than what every

delicate constitution feels in its degree from particular states of the weather; for weather is apt to be in such and such a condition when the moon presents such and such a phase. For it is generally admitted that the attraction of the moon and the sun, which produces the tides of the ocean, occasions atmospheric tides also: and it is very probable, indeed, that the latter may, especially at epochs when they are the strongest, determine changes in the condition of the weather. M. Arago, in a remarkable dissertation * relative to the influence of lunar phases on atmospheric phenomena and the vegetable realm, has established incontestable facts which, while destroying errors hitherto accepted, still prove that popular notions on the subject are not altogether without foundation.

It has been said:

"Great wits to madness nearly are allied."

It is curious that Dryden, who wrote the saying, was a very sound wit to the end of his life; while his wife, who was of a weak understanding, became insane.

Wordsworth has written an idle couplet about the insanity of poets:

"We poets enter on our path with gladness,
But thereof comes in the end despondency and madness."

If he did not mean madness in the ordinary sense, he should not have written this line; if he did, he should not have fallen, in the teeth of his information, into so vulgar an error.

There are very few instances of insane poets—true poets, who seek that glorious immortality of true greatness

"That lives and spreads aloft by those pure eyes
And perfect witness of all-judging Jove,"

or of insane great understandings of any sort.

Chaucer, Spenser, Shakspeare, Milton, Dante, Homer, Virgil, and many others were not mad; their minds were as sound as they were great. So might be said of Michael Angelo, Raffaelle, Newton, Bacon, Herschel, Burleigh, Sir Walter Raleigh, Sir Philip Sidney, Sir Francis Drake, Hampden, Cromwell, Bunyan, Clarendon, Chatham, Pitt, and a galaxy of great men, statesmen, warriors, philosophers and poets. So it has been with the infinite majority of the great men, renowned in art and literature, of all countries. If Tasso and a few others were exceptions, they were

* "Annuaire of the Bureau of Longitude. 1832-1833." See, also, in the "Annales Hydrographiques," 1st trimestre of 1864, the note on Meteorology by Admiral Fitzroy.

but exceptions, and the derangement in these eminent men has very doubtful characters about it, and is sometimes made a question.

Collins, whose case was after all one of inanition rather than insanity, had been a free-liver, and seems to have been hurt by having a fortune left him. Cowper was weak-bodied and was beset by religion mongers. Swift's body was full of bad humours. He himself attributed his disordered system to the effects of a surfeit, and in his last illness he broke out in enormous boils and blisters. This was a violent effort to help and purify the current of blood—the main object in all such cases. Dr. Johnson, who was subject to mists of melancholy, used to fancy he should go mad, but he never did.

The writer is not a believer *in madness in great minds*, hence one reason for his not sharing the belief with Dr. Ray, author of "Contributions to Mental Pathology," that Hamlet's insanity was real. Shakspeare has probably breathed more of himself into his Hamlet than into any other of his dramatic persons; his is a cast of mind at once philosophic and poetic; at once serious and mirthful; at once affectionate and brave: at once acutely observant of others, and profoundly reflective on self; instinct with noble sentiments, solemn convictions, immortal expectations. It is not of such material that lunatics are made of. The writer would like to know, from those who have most carefully studied the pathology of insanity, where there is a parallel case. It seems that in the thoughtful Prince of Denmark we overhear more of Shakspeare's inner man, his secret and serious cogitations and impressions. Hamlet is more profound in thought, more eloquent in language, than any other of Shakspeare's characters; he is marked by a solemnity of sentiment. Few madmen would like Hamlet, yearning after escape from life, restrain themselves from the act of suicide, by the apprehension of "something after death."

The subject is too long for discussion.* Schlegel says: "Hamlet acts the part of madness with inimitable superiority." The writer thinks so too, and he thinks his supposed madness is contradicted by his own words, where, speaking in confidence to his friend Horatio, he says:

> "How *strange* or *odd* soe'er I bear myself;
> As I, perchance, hereafter shall think meet
> To put an *antick* disposition on."

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* Read a work entitled "Shakspeare Treasury," by Charles W. Stearns, M.D., published by G. P. Putnam & Son.

And again, where in his remonstrance with his mother, he says :

> " Let not the bloated king
> Make you to ravel all this matter out,
> That I, essentially, am *not* in madness
> *But mad in craft.*

Hamlet had special reasons for not wishing his mother to lay the flattering unction to her soul that he was mad, as it would have destroyed the effect of his severe reproof to her for living in adultery with his uncle, thus not only disgracing herself, but bringing dishonour upon himself.

In the History of Hamblet, * Prince of Denmarke, we learn that the happiness of Horvendille, King of Denmarke, excited the envy of his brother Fengon, who was, moreover, enflamed by love for Geruth, the Queen. The villain paused not to commit a fratricide which placed him on the throne, and facilitated his union with the object of his guilty passion.

Hamblet, the son of Horvendille and Geruth, was quick in his perception of the danger to be apprehended from the murderer of his father, and sought safety in the appearance of mental imbecility, in fact, counterfeited the madman to escape the tyrannie of his uncle, and was greatly tempted by a woman (through his uncle's procurement) who thereby sought to undermine the Prince, and by that means to finde out whether he counterfeited madnesse or not. The woman was accompanied by certain courtiers who were deceived by Hamblet, and who assured themselves that without doubt he was distraught of his senses.

We learn also how Fengon, uncle to Hamblet, a second time to intrap him in his politick madnesse, caused one of his counsellors to be secretly hidden in the Queen's chamber, behind the arras, to heare what speeches passed between Hamblet and the Queen; and how Hamblet killed him, and escaped that danger, and how he was sent to England with secret letters compassing his death, and how Hamblet, when his companions slept, read the letters, and instead of them counterfeited others—or razed out the letters that concerned his death, and instead thereof graved others with commission to the King of England to hang his companions. Everything fell out as Hamblet desired; his attendants were executed.

We also learn that after Hamblet had killed his uncle Fengon he discarded the cloak of folly in which he had hitherto disguised

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* "Shakespeare's Library." by J. Payne Collier. 1850. A collection of ancient Novels, Romances, Legends, Poems and Histories used by Shakspeare as the foundation of his dramas.

his intellect, and, convening an assembly of the nobility, explained and justified his conduct. In fact he did what Shakspeare's Hamlet requested Horatio to do:

——— "Report me and my cause aright
To the unsatisfied."

It seems strange that Hamlet should always be perfectly sane or rational when he is in company with Horatio; he never exhibits to him any of those "fitful incoherencies" and "antick dispositions" which he betrays to Rosencrantz, Guildenstern and Polonius, whom he regards as spies set to "pluck out the heart of his mystery and sound him from the lowest note to the top of his compass."

Again, when Hamlet is alone, if we reflect upon his awful reverence for the Great Supreme, his reflections on man and his admiration of the works of nature, the philosophic turn of his mind, his acute penetration, his observations upon an infinity of unconnected and dissimilar subjects, who shall pronounce him mad—insane—bereft of reason—"driven into desperate terms"? He may have had a morbid melancholy preying upon his heart; his views of life may have been clouded; he may have been weary of the world and disgusted with his fellow-creatures. There are thousands such who are not irresponsible beings.

"What is this quintessence? Man delights not me,—nor woman neither." Would they delight any one under similar circumstances? A loving father

"Cut off in the blossom of *his* sin,
Unhousel'd, disappointed, unanel'd;
No reckoning made, but sent to *his* account
With all *his* imperfections on his head."

The fair Ophelia, whom he loved to such an extent that

"Forty thousand brothers
Could not, with all their quantity of love,
Make up *his* sum,"

locking herself from his resort, admitting no messengers, repelling his letters, denying his access to her, his remembrances suddenly and ungraciously returned to him:

"His path ever dogged by spies."

Yet we are asked to believe Hamlet to be mad because he is harsh to Ophelia, sarcastic to Polonius, and discorteous to Rosencrantz and Guildenstern, disdainful to the King who had "killed

his father, *abused* his mother, popped in between the election and his hopes, and thrown out his angle for his proper life."

A careful reading of the Hystorie of Hamblet, to which reference has been made, contributes much toward the illustration of a character deemed peculiarly difficult. It will assign rational motives for actions otherwise unintelligible, and lay the foundation for the necessary distinction that has been made between the natural and artificial character of Hamlet, and will explain the reason for his deportment to Ophelia.

The Ophthalmoscopic Appearances in Certain Cases of Epilepsy

By Reuben A. Vance, M.D., New York City.

The ophthalmoscopic appearances in the following cases are so peculiar and interesting that I desire to call the attention of other observers to them, and, as the mechanism of their production is closely connected with many physiological actions and pathological processes, to learn from the researches of others the relative frequency with which these phenomena occur in individuals suffering from the various forms of cerebral diseases attended by loss or impairment of consciousness

Case I.—One morning during the early part of February, 1871, while making an ophthalmoscopic examination of a young gentleman under my care for epilepsy, the parts in the region of the optic nerve-entrance of the right eye being in view, certain vessels disappeared, the papilla underwent a peculiar but not very definite change, and the patient fell to the floor in a fit. Prior to the attack, the arteries and veins were very distinct, and the vascular branches of the disk quite easily traced. At the moment of attack certain vessels contracted, but whether they were discal or retinal I was unable to determine, from the sudden movement of the patient. About two hours subsequently I again made an ophthalmoscopic examination, and found the retinal veins enlarged and tortuous, and the parts about the nerve-entrance very much congested.

Case II.—Another patient under my care at the same time, who originally suffered from attacks of the *grand mal*, due to cerebral congestion, ultimately recovered to such an extent that the paroxysms of the severer form of the disease had entirely disappeared. He complained, however, of sudden momentary attacks of vertigo, which recurred many times a day. He did not stagger or fall—in short, presented no external indications of anything wrong, at such times—but was quite fearful lest these new symptoms might indicate a tendency to apoplexy. While making an

ophthalmoscopic examination on one occasion I observed a sudden diminution in the size of the main trunks of the retinal arteries, with pallor of the disk, followed by dilatation of the vessels and increased vascularity of the parts near the papilla, coinciding with a brief lapse of consciousness. At another time I again saw somewhat similar phenomena, but much less marked.

Case III.—A young lady at present under my care suffers from both forms of the disease. Attacks of the *grand mal* recurs monthly, but the *petit mal* is manifested many times daily. As any excitement will develop the latter I have repeatedly observed the ophthalmoscopic appearances which accompany it. These vary with the severity of the attack, which is occasionally the merest sense of vertigo, and at other times complete, though momentary loss of consciousness, with or without local muscular movements of the upper extremities. With the vertiginous sensations, slight but distinct waves of contraction can be seen in the retinal arteries, with temporary fullness of the retinal veins, *followed by collapse of the same, the arteries still remaining small and thread-like.* With the loss of consciousness and local muscular movements there is noticed a short and spasmodic inspiratory movement, accompanied by a gasping sound. With these attacks the intra-ocular changes are most marked, the collapse of both arteries and veins is very apparent. The arteries emptying themselves by a wave of contraction passing from the centre to the periphery, these veins, after a brief but distinct interval of distension, are rendered bloodless by a movement too quick to be appreciated in detail. The vascularity of the disk, at the same moment, is very much diminished. Between the attacks the intra-ocular structures are moderately congested.

Postponing, for the present, any discussion of the various theories of epilepsy, and viewing the phenomena observed in these cases as isolated clinical facts, I would simply call attention to the close connection existing between spasm of the muscular coats of the intra-cranial vessels and loss or impairment of consciousness. These cases show that the ophthalmoscope occasionally reveals similar vascular phenomena in the intra-ocular structures, occurring coincidently with either form of the disease. The comparative frequency of cases in which these changes can be seen is a matter that can only be determined by a more general employment of the ophthalmoscope in convulsive disorders by the physicians who treat them. Such observations, conducted by different observers, will doubtless be productive of valuable results, and should it be found that the phenomena presented in these three cases can be seen to occur in others, it will not only materially advance our

knowledge of the manner in which convulsive phenomena are initiated, but will indicate the method in which disease in general acts to suspend or abolish the functional activity of different bodily organs.

In the third case referred to the peculiar appearance presented by the retinal veins is alluded to. The sudden evacuation of their contents was a phenomenon that at first seemed inexplicable, but subsequent observation revealed the fact that it occurred with inspiration, and was of the same nature as the collapse of the superficial veins of the neck, which can often be seen with that act.

New York, 124 East 27th Street, 9th May, 1873.

Some Conclusions in Regard to General Paresis, with the Report of a Case under Observation. By Horatio R. Bigelow, Boston, Mass.

A case of general paresis now under treatment, although only in the first of the three stages described by Calmeil, suggests a few conclusions in regard to some of the characteristic nervous phenomena which form a prominent symptom in the development of the disease.

First of the Case.—The patient is a man fifty years old, tall and stout; the forehead is very narrow transversely, depressed in the region of the spheno-frontal articulation and at the cranial and vertex; the face, when at rest, is entirely devoid of expression, the integumental folds are obliterated; the chin is corrugated from contraction of the levator-menti muscle; the complexion is sallow; the eyes are sleepy and dull, the pupil of the right being larger than that of the left, and dilating irregularly; there is an air of perfect placidity and great self-importance about the patient's demeanor; the appetite is almost voracious, at the same time that it is capricious; there is, also, occasional regurgitation of the food.

Local Alterations.—Muscles of tongue affected; there is hesitancy of utterance, inability to pronounce the labials correctly, a slurring, guttural manner of speech, but with no disposition to garrulousness, the patient recognizing his own defects; while giving utterance to certain words the head is thrown slightly upward, and the lower lip twitches spasmodically, conveying a peculiar motion to the chin; the tongue alternately contracts and relaxes when protruded.

Motor Functions.—Some of the local phenomena might point to a more advanced stage of the disease, were it not for the fact that the motor functions of the extremities are not perceptibly impli-

cated; the patient's walk is a language of its own, it conveys the entire sense of egotistical importance, that entire indifference to other mortals which is so characteristic of the mental condition of the patient; the foot, but slightly raised from the ground, is advanced slowly, with but little flexion of the leg, and planted flat on the ground with a determined air.

Mental Condition.—There is unvarying contentment of mind, buoyancy of spirit, and unclouded hope; to an interrogation as to the state of his health, he would make reply, "First rate; never better," &c.; he is fond of discoursing upon the extent of his business, his charming residence, and his family connections; he is contemplating a tour on the continent, with his family, to extend over a period of many months; his memory of past events is perfect, but he cannot remember the substance of what he has read five minutes previously; he has developed a decided tendency to kleptomania of late, using much ingenuity in concealing his depredations; he has great elation of ideas, and sees everything *couleur de rose.*

Ophthalmoscopic Signs.—Congestion (slight) of the disk.

I am aware that his case presents no features hitherto unknown to the profession, but it is an excuse for dwelling somewhat upon the value of the ophthalmoscope in the diagnosis of cerebral diseases, and for advancing a few theories in regard to the mental implications.

I am indebted to my friend Dr. R. A. Vance, an eminent practitioner of New York City, for the valuable data in relation to the ophthalmoscopic signs in general paresis.

"In every case of general paralysis that has fallen under my observation, the ophthalmoscope has revealed morbid changes of a vascular, neuritic, or atrophic character. In thirty-one cases of which I have notes of the intra-ocular appearances at the time I first examined them with the ophthalmoscope, eleven presented evidences of atrophy of the disk and surrounding parts of the retina, thirteen of neuro-retinitis, and seven of congestion of the disk and retina. Those cases in which neuritic and atrophic changes were marked were of long standing, while those in which vascular derangement alone was present were in the early stages of the disease. In three out of seven cases characterised by congestion of the intra-ocular structures, repeated ophthalmoscopic observations demonstrated the subsequent development of neuro-retinitis, which finally terminated in atrophy of the intra-ocular portion of the optic nerve. The rapidity with which the neuritic and atrophic changes succeed the congestive appearances bears no relation to the general progress of the intra-cranial disease, but

seems to depend upon local causes which, as yet, have not been determined."

The "elation of the ideas" is due to a vicious action of the vesicular neurine of the ideational centres, rather than to an exaltation of the faculties of the mind. The molecular condition representing imagination undergoes a specific, minute change, by which its harmonious action with the centres of judgment becomes disrupted, and commonplace expression results. One of the first appreciable mental changes of general paresis consists in this perverted imagination, this intellectual feebleness; and from the consideration of these symptoms we are led to a probable location of the universal lesion. There is in this disease a very manifest want of emotional control. Now, as emotion depends upon the sensibility of the vesicular neurine to ideas, and as the idea depends upon the impression made upon the supreme centres,* it follows that any molecular change of this latter will affect all the mental organization. Since we believe that the human mind is the perfected harmonious *force*, generated by the ideational centres, and that this force will vary in intensity according as it is evolved by a more or less intricate arrangement of the cerebral convolutions, and from a small or large number of cells. The emotional aberration depends directly upon a degeneration of will, which we should expect to be the case, as no such abstraction of *the will*, apart from its mental relationship, has a recognized existence. That memory preserves its integrity to an advanced period in paresis may be due to the fact that the centres in which ideas are registered are the last to yield to the vicious action, or that the residual force of the previous normal condition thus stored up discharges with fidelity its routine of the past, without having sufficient vital organization to retain impressions of the present. Corroborating instances of this species of conservatism are by no means rare in the life of private practitioners, being frequently met with in the course of certain febrile and cerebral diseases. In every organic element of the body there is this registration of ideas, and the impression once made is indestructible; but as the integrity of action depends upon the harmonious assimilation of philosophical ideas, the retentive power may be perverted or obscured by an abnormal condition of the ideational centres. From the relation and assimilation of ideas emanate imagination, hence a vivid imagination would result from some molecular change in the centres generating the idea, while an unhealthy imagination would depend upon diseased action of those centres.

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* Mandsley's "Body and Mind."

Whether the paralysis precedes the mental degeneration or is preceded by it must, at present, be considered as *sub judice;* but I am inclined to believe that, in the great majority of cases, want of motor co-ordination is secondary to the nervous lesion. This supposition is based upon a knowledge of the intimate and dependent relationship of the sensory-motor and higher nervous centres. A disease of one centre, by a process of vicarious emigration, may convey its contaminating influence to a very remote cell, whose functions in the processes of life and thought may be of an entirely different nature, thus developing a complex irregularity out of the original simple lesion. Who shall limit the extent of power in the higher centres? or who can measure the dependence of the physical upon the psychical? The minutest polar change in the molecular arrangement of the vesicular neurine of these supreme centres is felt, sometimes inappreciably, throughout the human organism. A prick of a pin conveys to a special department its sense of pain, and immediately a reflex action ensues in the member thus abused; but if disease interrupt the action of this nervous centre, anæsthesia of the parts supplied by it necessarily results, so soon as the primary residual force shall have spent itself. In those cases of general paresis in which it is asserted that the paralysis manifested itself primarily it is more than probable that the mental lesion did exist, but manifested itself by such slight external symptoms as to have been overlooked.

Notes of a Case of Cerebro Spinal Meningitis. By JOHN BELL, A.M. Ex., M.D.; Physician to the Infants' Home, Montreal.

(Read before the Medico-Chirurgical Society.)

On Wednesday, April 9th, 1873, I was called to see a girl, A. R., aged 13, who had been attending one of the public schools, for the spring examinations in which she had been reading hard. During the summer she lives in the country, and she has always been an unusually strong, well formed, but quiet girl, fond of out-door exercise. Her parents are strong and healthy, as well as all the rest of the children of their family.

For five days before I was called in she had been drowsy in the evenings, and had not felt so well as usual, which was put down to biliousness and hard study. When I saw her she had been vomiting more or less for two or three days, and complained of pain and an uncomfortable feeling in the head, with weakness and loss of appetite. There was, also, some pain in the back which, she thought, was due to her having been in bed since the day before. From the season and extremely dirty surroundings of the

house in which she lived, I at first suspected that at the worst this would turn out to be a case of typhoid fever. I prescribed lime-water and milk, which at once arrested the vomiting, and as recommended by Harley in the early stage of typhoid fever, and which I have always found very useful, I gave a few small doses of grey powder. Her head was frequently bathed in cold water, which removed the pain in the head.

Until Sunday, the 13th, she continued to improve in every way; her tongue, which at first had been coated, cleaned off, leaving only a dirty, brownish streak along the middle; the headache had disappeared, although there was still some pain in the lumbar region, and sometimes between the shoulders. I had seen her at 2 p.m. in the above apparently convalescent condition, and about 10 p.m she had fallen asleep, feeling unusually well, but woke up about an hour afterwards unable to speak, when I was sent for in haste, as it was thought she was dying. Found her pulse 104; temperature 100.6; her bowels had not been moved as usual during the day, so I gave her a purgative dose of calomel, and ordered a few gr. xx. doses of bromid of potassium. I now expected that I had a case of cerebro-spinal meningitis to treat, probably of the epidemic form. From this time I made notes of the case, which I will merely copy from my pocket-book even at the risk of being prolix and particular.

April 14th, Monday 10 a.m.—Pulse 112; temperature 100.7; is rather more sensible or conscious than she was at time of visit last night; forms her mouth to speak but cannot utter a word; stiffness of neck and back, on attempting to move, is well marked. To have snow covered with flannel constantly applied to head and back of neck.

6 p.m.—Respirations 25; pulse 112; temperature 100.8; began to speak at 1 p.m.; is very drowsy, and irritable when disturbed. To have Bromid. Pot., gr. x.; Pot. Iod., gr. v.; Quinine, gr. j., every four hours; with gr. j. doses of Calomel at the same intervals of time.

April 15th, 11 a.m.—Respirations 30; pulse 120; temperature 100.5; became almost perfectly conscious about half-past two this morning, and thought it was still Sunday night; bowels moved twice during the night; neck not quite so rigid as before, and has no pain except when moved; there is some pain in the muscles of the legs when they are forcibly straightened, but none when flexed.

6 p.m.—Respirations 28; pulse 112; temperature 99.2.

April 16th, 11 a.m.—Respirations 27; pulse 112; temperature 99.2; she became quite conscious about three this morning; neck stiff, and pain caused by attempt to bend head forward; belly still somewhat retracted; she passed an alvine evacuation of a greenish-

brown colour in bed this morning; a few bright-red, slightly raised, acuminate spots are out on her arms.

6 p.m.—Pulse 108; temperature 100.8.

11 p.m.—Respirations 21; pulse 112; temperature 99.6; has passed three motions in bed during the day, and has occasionally felt the clothes as if measuring the edge of the coverlet; if disturbed would draw the bed-clothes up under her chin and then rest quietly; the skin was very warm at six, now cool, with slight *cutis anserina* To continue same medicines and applications, and has for diet strong beef-tea with milk and eggs.

April 17th, Thursday, 11 a.m.—Respirations 32; pulse 135; temperature 99.5; rested quietly all night; not quite so conscious as before, but knows those around her, and asks for drinks; passes evacuations in bed, but is apparently aware of it.

6 p.m.—Respirations 33; pulse 140; temperature 100.6; seems conscious, but is not like her usual self; gums slightly "touched," bleeding when pressed. Stopped Calomel powders.

April 18th.—Respirations 34; pulse 150; temperature 101.2; slept from eleven last night till eight this morning, when she was taken out of bed to have it changed, during which process she helped herself a good deal although very weak; occasionally picked at the bed-clothes during sleep; she asked to get up to stool this morning although her bowels were moved twice in bed during the night; has been very thirsty yesterday and this morning, talks quite sensible but peevishly; has abnormal sensations *e. g.*, imagines her chemise is rolled up on her back and wants it pulled down; has some pain in the head, but appears to move it more easily than before; finished her medicine this morning. To have an ounce of port wine every two hours.

6 p.m.—Respirations 34; pulse 135; temperature 98.4; is quite conscious; knew her father who came in from the country; takes interest in passing conversations; was sponged all over; bowels moved once in bed after bath; taking only food and wine; slight external strabismus of right eye; forehead cold from profuse perspiration.

April 19th.—Respirations 33; pulse 135; temperature 100.2; has slept very quietly all night, and said nothing except ask for drinks; passed thin, yellowish stool in bed about 8 a.m.; pulse softer than it has been; perspires freely and face flushes red at times; is more correct in her appreciation of sensations than she has yet been, *e. g.*, as to how her clothes are arranged, and as to impressions made by other things in contact with her; has perfect use of her limbs; the pupils have always been widely dilated

except at the commencement of the attack, when the left was somewhat smaller than right. To have ℥j. wine every hour.

6 p.m.—Respirations 38; pulse 148; temperature 100.6; is quite conscious and able to speak perfectly; eyes somewhat suffused; conjunctivæ slightly reddish; on a level with the right lower lid there is evidently ulceration through the conjunctival layer of the cornea, and from this proceeds numerous enlarged capillaries; tongue slightly coated; complains of pain in middle of her back, and in her legs, when they are moved. To have the former Bromid mixture every four hours.

Sunday, 20th April, 1:30 p.m.—Respirations 46; pulse 160; temperature 100.8; condition of right cornea same as before; insides of both eyes are widely dilated and of a uniform light-yellowish colour, and apparently homogenous structure from the deposit of lymph; they are unaffected by light, and she cannot see; there is dulness of lower posterior part of right lung.

9 a.m.—Pulse about 170, dichrotous; respirations 46; temperature 102; answers questions intelligently; puts out tongue when asked, &c.; perspiring freely; cheeks with a purplish flush; eyes in same condition as last night. To have one ounce wine every half hour until next visit.

11:30 a.m.—Has just died; face not very pale; cornea clear; irides same as before; lower and back part of right lung dull on percussion; apex in front almost tympanitic.

POST-MORTEM EXAMINATION FORTY-EIGHT HOURS AFTER DEATH.

Owing to unavoidable circumstances a post-mortem examination of the body could not be obtained until Tuesday afternoon, when the friends of the deceased were beginning to assemble for the funeral, so that the examination was necessarily hurried. I am indebted to Dr. Roddick for making it with me. The brain and spinal cord as far down as the fifth dorsal vertebra were the only parts examined. The view of the *dura* and *pia mater* were, through the entire extent of these membranes, intensely congested with dark fluid blood. The arachnoid membrane seemed to be more opaque than normal, and small quantities of pellucid lymph coated the surface of the base of the brain, particularly in the region of the optic commissure, glueing the fissures and convolutions together and presenting an irregular or granular surface when these parts were torn asunder. The quantity of sub-arachnoid fluid did not seem to be much increased, or it must have escaped in removing the brain. The same conditions existed in

the parts of the spinal cord examined, and, in addition, the venous plexus separating the cord from its bony canal was found gorged with blood. Under the microscope small portions of cord presented capillaries containing single and double rows of blood globules, slightly overlapping one another; but I am ignorant if this be a pathological condition or not. The brain substance seemed to be even more than usually tough and sticky. The *puncta vasculosa* presented about the normal appearance. The choroid plexus was very vascular and prominent. In the left lateral ventricle there was about two drachms of fluid, but in the other ventricles the quantity was normal. No time was allowed for further investigation.

Judging from the post-mortem appearance of the meninges of the brain and spinal cord in this case, I think that the local abstraction of blood and frequent dry cupping of the back of the neck and spine would have been powerful adjuvants in its more successful treatment. In two cases which I have treated since I have found these remedies give great relief to the pain and other symptoms. Although Radcliffe, in his article on epidemic cerebro-spinal meningitis in Reynold's "System of Medicine," says that "it does not appear that any decided good has arisen" from the administration of iodide of potassium, it seems to me that it should prove useful, judging from its almost specific influence over periostitis, an inflammation of a structure very similar to the meninges of the brain, and from its influence in stimulating the removal of effused matters.

The other two cases to which I have referred and believe to be epidemic cerebro-spinal meningitis, have been under treatment for three and four weeks respectively. The pain, stiffness of the neck, and many other symptoms have disappeared wholly or in part, but there still remain a somewhat increased temperature, rate of pulse and respiration, and great weakness. I should like to hear an expression of opinion as to the treatment in this subsequent typhoid condition which, I understand, has been met with in cases treated by other gentlemen.

Since I met with the case reported above I have also had two patients suffering from vomiting, severe headache and pain in the back, with stiffness of the neck, severe pain in the bowels and side, and varying differences in the size of the pupils; but these symptoms passed away on the administration of mercury, bromide and iodide of potassium, with cupping of neck and back and the constant application of cold to these parts.

1 Beaver Hall Terrace, April 16th, 1873.

Correspondence.

LONDON CORRESPONDENCE.

Since my last letter I have been much out of town and, therefore, had not an opportunity of taking medical and surgical notes of cases occurring in the hospitals. At Moorfield's things go on much as usual. I saw an interesting case under Mr. Jonathan Hutchinson, illustrating the results of the treatment of pannus from obstinate granular lids, by inoculation with gonorrheal matter. This was done three years ago. The patient was a woman about thirty years of age. At the time, the left eye was the worst, the cornea was extremely vascular; the right eye was not nearly so bad. Mr. Hutchinson inoculated the left eye, but did not intend doing so to the right. However, through carelessness the woman managed herself to communicate the disease to the right eye. The case was progressing favourably when, unfortunately, the right eye became seriously worse, and a perforating ulcer of the cornea was the result. At the present time the left eye looks perfectly healthy, with the exception of slight cloudiness at the upper segment of the cornea; the lids are quite healthy and free from granulations. In some remarks made about the case, Mr. Hutchinson said that he should not have inoculated the right eye, nor did he intend at the time the case was under observation that such should have occurred. It was not safe to follow this treatment unless the cornea was very vascular and quite covered with vessels. He had performed the operation in some dozen cases, and with satisfactory results. This case had been sent to him by Mr. Hulke. Another case under Mr. Hutchinson was a deep wound of the eye from the blow of a stone. The patient was a child about seven years old, and the ciliary muscle and cornea were deeply divided. He recommended excision of the eye-ball as a protection to the sound eye which, he said, ran considerable danger from sympathetic inflammation, in which case the result would, in all probability, be total blindness in the sound eye, and, perhaps, a chance of perception of light in the injured eye. Excision seems to be generally practised in severe injuries of the eye-ball at this hospital, and the results are usually very satisfactory.

Mr. Streatfield told us a story this morning in re strabismus. A boy came to the hospital one morning bringing his sister to be operated on for squint. Mr. S. had operated on the boy for the same some time before, so he asked, "How did your sister get the

squint; did she catch it from you?" "Oh, no," said the boy, "she didn't catch it from me; she caught it at the barber's shop." "Why how on earth did she catch it at the barber's shop?" "Oh, we don't know, sir; we think it must have been a fright."

At University College Hospital there was an interesting post-mortem examination of what was termed fibroid phthisis. The lung was contracted and indurated, and although several large cavities existed they could not be detected during life. In addition, there was carcinomatous deposits in the liver, spleen, œsophagus, stomach and supra-renal capsules; and, also, peritonitis from perforation.

Under Mr. Critchett, at the Ophthalmic Hospital, Moorfields, a very interesting case came under our notice. It was a girl on whom Mr. Critchett had operated four years ago for pannus, performing periotomy as recommended by Dr. Furnari, of Paris, in 1866. The result was now, four years after the operation, all that could be desired. The granulations, on which the pannus had originally depended, had almost entirely disappeared, the removal of the effect thus seeming to have reacted on the cause. In another case under Mr. Critchett, one of congenital cataract with clear circumferential margins in both eyes, in a child, he made an artificial pupil in each eye, and stated that it was much the most successful mode of treatment. On the same occasion he performed several operations for squint, one of which was a very bad case, the cornea of one eye disappearing almost entirely in certain positions of the eye. Another case was that of a Portuguese sailor who had one eye removed by Mr. Lawson some years ago, and who presented himself with cataract in the other. Mr. Lawson remarked that he would be a good case for Mr. Plimsoll, M.P., who is just now agitating a good deal about our merchant seamen. Here was a man who had worked his way to England from Lisbon and back again several times, receiving no wages on account of his defective sight, on a vessel of 180 tons burthen, with a crew of ten men. He was obliged to take his turn at the helm at night, when he could not see the binnacle, and could only steer by the stars, when they were to be seen. Although he could not see the compass he could catch sight of a star now and then, and he said he used to make shift to steer in that way. This is either a tough sailor's yarn or else it fully illustrates the saying that "there is a sweet little cherub who sits up aloft and takes care of the fate of poor Jack."

I went round Charing Cross Hospital with Mr. Canton the other day, and saw some interesting cases. Mr. C. always performs excisions of the knee-joint with the H incision. He says that he

likes plenty of room, and that there is no danger in cutting skin and muscle, and that by adopting the H you see your way clearer and have more advantage for drainage afterwards. His cases do very well, I believe. Butcher, of Dublin, also prefers the H incision, but I think it matters very little, as with the semicircular sweep, such as you are in the habit of using at the Montreal General Hospital, if the angles of the incision are well back you get quite sufficient drainage and certainly abundance of room to see your way clearly.

London, May 7th.—I take up my parable again after an intermission of nearly a week, in consequence of absence from the city. I am indebted to Dr. Osler for the notes of the following cases:

To day, at University College Hospital, Mr. Erichsen had a case of epithelioma of the tongue which he determined to remove by the galvanic ecraseur. For some reason the wire was not sufficiently heated, and the bleeding from one of the lingual arteries was so profuse before it was tied up that the man became asphyxiated from the blood getting into the larynx. It was very re-assuring to us young surgeons to witness the cool way in which Mr. Erichsen decided at once, and cut down on the larynx and opened it. Mr. Heath at once put his lips to the wound and sucked out all the blood he could, the assistants at the same time put in practice Sylvester's method of artificial respiration. After a little less than two minutes the patient was rescued from his perilous position, and respiration again re-established. Mr. Erichsen made some pertinent remarks on those whose business it was to see that the battery was in working order, and said that though in the past eighteen months they had had about a dozen cases, in no case except the present had a drop of blood been lost, and that it was too bad that a patient's life should be jeopardized through the carelessness or incapacity of subordinates.

Sir Henry Thompson performed lithotomy on a man about sixty years of age and very stout. In his second incision he entered the bladder, but owing to the perineum being uncommonly deep he had to trust to the forceps altogether, as he could not use his finger to assist in getting a firm hold of the stone; however, he rapidly extracted the calculus which was of considerable size. Mr. Heath amputated through the condyles of the femur (Stokes' operation) retaining the patella after removing with the saw its articular surface.

A boy aged six years was treated as an out-patient some time since for a slight attack of articular rheumatism, accompanied with a pericardial murmur which, however, was slight. In February he was admitted to hospital, suffering from bronchitis, pericardial

effusion, and ascites. About the 23rd of April he was tapped for the pericardial effusion. Mr. Heath performed the operation with the aspirator, removing about four ounces of clear fluid. This relieved him somewhat, though the line of dulness was not much diminished. At the end of a week he was again tapped, with greater relief, and he became much easier. During this time the ascites increased, necessitating the tapping of the belly, which relieved him considerably. The boy is now about holding his own, but Sir William Jenner has no hope of his ultimate recovery, as the cause of his ascites is not removed.

I visited the Exhibition of the Royal Academy at Burlington House, Piccadilly, yesterday, and amongst other paintings there was one by Sir Henry Thompson, the subject being "A Summer Evening on the Thames, near Henley." It is a clever picture and reflects much credit on the artist who had snatched time from his arduous professional duties to cultivate the fine arts. There were also three paintings by Sir Robert Collier, who occasionally devotes his vacations to sketching in Switzerland. I must confess, I was somewhat disappointed with the pictures; taking them altogether, that is, so far as the subjects went, as they appeared to me to be rather trivial in character. I hope to see you soon as it is my intention to sail for Canada on Saturday next the 10th instant.

Yours truly,

A. A. B.

Reviews and Notices of Books.

Illustrations of the Influence of the Mind upon the Body in Health and Disease; designed to Elucidate the Action of the Imagination. By Daniel Hart Tuke, M.D., M.R.C.P.; joint author of "The Manual of Psycological Medicine," &c., &c. 8vo.: pp. 415. Philadelphia: Henry C. Lea. 1873.

The name of Tuke is familiar to all students of the disease insanity. The grandfather of the author laboured with Pinel and others interested in the study of this disease to modify if not entirely change the views entertained of its pathology and treatment. Through their teaching and influence the maniac was freed of his hains, and was restrained in his fitful wandering by gentleness and quiet persuasion. A new era dawned on the history of this disease, the maniac was no longer regarded as an outcast, who

had fallen from grace and suffered this special affliction at the hand of Almighty God for some unrepented sin, and had become possessed by the devil whose name is Legion, but was looked upon as suffering a brain-disturbance of some sort, which was amenable to treatment and in many instances curable.

The father of our author, a physician of note followed in the track and advocated warmly the views, advanced by those who preceded him, regarding insanity and its rational treatment, and was gratified by the establishment in England of an institution where the insane were treated like human beings, which was eminently successful in restoring many to health and usefulness. In fact nothing was more conducive to remove the prejudices and opinions of the day regarding insanity than the admission of its being a curable malady or at least a disease that in many instances admitted of reasonable hope of escape from life long affliction.

Dr. TUKE, the author of the work before us has already acquired distinction by publishing a work, in conjunction with Dr. Bucknill, on "psychological medicine." In the present volume the author explains in his preface that he was led to the consideration of the importance of the subject of the influence of the mind on the body from the occurance of a somewhat remarkable case of apparent recovery from an attack of Inflammatory Rheumatism, resulting from a railway collision.

Some time after the author forwarded to the Journal of Mental Science a paper bearing the title of this work. He states "about "190 pages have appeared in that journal. The chapters already "published have been much extended, and part IV treating of "the influence of the mind upon disease, is, in common with "several chapters, entirely new." The author gives the following reasons for publishing his observations and researches in book form.

"To collect together in one volume authentic illustrations of the influence of the mind on the body." These cases are found scattered through many medical works, and some that the author chronicles have never before appeared. In order that these cases may possess interest and value the author has arranged them "on a definite physiological basis." Again the object of the work is "to show the power and extent of this influence not only in health "in causing disorders of sensation, motion and the organic tunc- "tions, but also its importance as a practical remedy in disease." Another object embraced in this work is to "ascertain as far as possible the channels through, and the mode by which this influence is exerted," and to sum up this inquiry to seek "to

elucidate the nature and action of what is usually understood as the imagination." In every-day practice the physician is forced to ascribe the occurrence of many symptoms to the imagination, or again, the relief of other symptoms as due to the same cause; if, therefore, the imagination has so much to do in the production or removal of discomfort, or has any effect on disease actually existing, then indeed should the physician carefully study, and endeavour to unravel, the mysterious influence of the mind on the body and its functions. But inasmuch as we are not all constituted alike, not all equally imaginative or credulous, the effect of mind on the body as a curative agent must be limited in its operation.

The work is divided into four parts. In the first he discusses the influence of the intellect on sensation, on voluntary and involuntary muscles and on the organic functions. In part two we have considered in the same order the influence of emotions.

In part third the effect of the will on sensation, motion and organic functions, is elucidated, and in the fourth part the author takes up the subject of the influence of the mind upon the body in the cure of disease.

Throughout the work, the author has reduced his views and observations to something like systematic order. The volume abounds with curious facts, but no attempt is made to show why, or how the body is subservient to the mind. In the present state of our knowledge on this abstruse subject, we must rest contented with the phenomena as observed, without being able to account for them. The relationship between mind and matter is undetermined, nor is it at all likely that this point will ever be definitely settled.

In this latter part of the book the subject is considered in three chapters. The first is devoted to Psychological and Physiological principles. The next chapter is on the influence of mental states upon disorders of sensation, motion and the organic functions, and the third is devoted to Psycho Therapeutics, and the practical application of the influence of the mind on the body to medical practice.

The curative power of the imagination is illustrated by many remarkable cases. Many of these are curious and almost come within the term miraculous; probably those who believe them might be deemed credulous, were it not that they possess an authenticity which places them beyond cavil. This chapter is divided into six sections. In the first is considered the general influence of the physician upon the patient in exciting mental states which act beneficially on the body in disease.

In the second section is considered the importance of exercising or arousing the will.

In section three we have considered "systematic excitement of "a definite expectation or hope, in regard to the beneficial action "of totally inert substances."

In section four we have taken up and discussed the direction of the attention to some particular region of the body with a view of inducing the expectation of certain results without the administration of inert drugs. In the fifth section the combined influence of arousing certain mental states by lightly touching the affected part, and in the last section we have discussed the effect of exciting certain mental states as in mesmerism, &c. This chapter is one of the most interesting in the volume, and should be perused very generally; every practitioner will find in it food for reflection, as it is replete with practical suggestions bearing on the influence of the mind on the body.

Altogether this work is the most valuable collection of well authenticated facts which are suggestive of application by medical practitioners in the treatment of disease. We commend it to our readers.

Surgery.

ABSTRACT OF A CLINICAL LECTURE ON THE TREATMENT OF PSOAS AND OTHER LARGE ABSCESSES.

Delivered at St. Thomas's Hospital, London, by JOHN SIMON, ESQ., F.R.S. Surgeon to the Hospital.

In reference to several cases of large chronic abscesses under his care, Mr. Simon remarked, that the only real difference between psoas and most other abscesses due to diseased bone was, that its cause was deep within the body. If the the diseased bone could be removed, the abscess would heal: but the bodies of the vertebræ were out of reach: the surgeon could only mitigate the symptoms, and leave the rest to nature. If the disease were only caries, a cure might result, with more or less angular curvature of the spine; but if necrosis were present there was no chance of a cure, the dead bone was not absorbed, its presence kept up a constant purulent discharge, and this led to anæmia, to albuminoid disease of the liver and kidneys, and finally to death from hectic and exhaustion.

In all these cases of chronic suppuration the amount of consti-

tutional and visceral damage is closely proportioned to the amount of the discharge: the amount of the discharge is proportionate to the extent of the abscess-cavity, and this depends, to a great extent, on the time it is suffered to extend. The great point in the treatment of these cases is, as far as possible, to prevent the formation of a large pus-secreting cavity. If, therefore, there be any suspicion of the existence of deep suppuration, keep a sharp look-out, and open the abscess as soon as you can detect fluctuation, unless the proximity of large vessels, or of other important structures, affords strong reasons for delay.

In situations where the progress of the disease can be watched, as, for example, in abscess of the knee-joint, the difference in the result, according to whether you let out the matter early or not, is very great. If the pus be soon evacuated, there is a fair chance of saving the limb, and even of regaining some motion in the joint; but if the incision be postponed, the joint soon becomes utterly disorganized, burrowing sinuses form, and the neighbouring soft parts become deteriorated by infiltration.

There is, however, this serious difficulty in opening a psoas abscess. Perhaps it forms a large bulging tumour in the groin, yet the patient is fairly well; you cut into it, he at once becomes feverish, and in a fortnight is *in extremis;* then an ignorant person may reproach you with killing the patient. But, however well and strong the patient may appear, it is certain that this febrile condition will supervene sooner or later. It is inevitable. The longer it is postponed the worse it will be, since the cavity of the abscess will be larger. Be careful, then, always to explain to the friends of the patient that the operation is a serious one, but that the consequence will be more serious the longer it is delayed. The severity of the consequent fever may, however, be greatly mitigated by treatment. Ten days ago I opened a large dorsal abscess in a little girl now under my care. I made a free incision, a very large quantity of thick pus escaped, and air was not excluded, yet the child has hitherto had no fever, and appears quite comfortable. All this time the cavity of the abscess is shrinking; and if the fever should now appear, it would have been far less severe than it would have been had it occurred immediately after the operation. I owe this satisfactory state of things to the local application of cold; directly the pus was evacuated an ice-bag was applied, and has been continued since. I have succeeded equally well in a large number of similar cases, and I can confidently recommend ice as an incomparable antiphlogistic.

Of course, if necrosed bone be present, the abscess will not

entirely close; a mere sinus will, however, be left, which will not drain the patient to any considerable extent.

As I have said, I do not take extreme precautions to exclude air. At present I am inclined to reserve my judgment as to the value of the carbolic acid treatment, or at least as to the theory on which it is based; it is not yet proved that bacteria are the cause of unhealthy inflammation; and emptying an abscess by aspiration does not prevent the inflammatory process in its cavity. Recent experiments do, however, show that bacteria pass very readily in water, and attached to moist things; and common experience teaches us that infection is much more likely to be carried by sponges and surgical instruments than by mere air. From my own experience, I do not think that air, if only ordinarily pure and dry, is such a poison to surgical wounds as some assert; but, whatever your theory may be, always carefully disinfect all surgical instruments, etc., with boiling water.

Finally, I must qualify my advice with a caution: remember that fluctuation is not always due to pus. Open early all acute or chronic abscesses, but never cut into collections of blood or synovia. A bruise, in ill-conditioned subjects, may be followed by extensive extravasation of blood, causing a fluctuating tumour, which, if deep in the limb, might easily be mistaken for an abscess. If these extravasations be let alone, and treated with cold applications, they disappear, though they may take a long time about it; but an incision into one is generally followed by grave constitutional symptoms. If well-marked signs of inflammation appear you must treat the swelling as an abscess; otherwise never open one.

When you are dealing with chronic suppuration always look out for the chronic cause. The tendency of inflammation is to subside, unless there be a stimulus of some sort present. A man was admitted here some time ago with a deep wound in the gluteal region, caused by falling on a spike; the wound did not heal, and after some weeks, on careful examination, a piece of his trouser was detected at the bottom. So, again, there is a boy with disease of the knee-joint, in my ward, who leg has been saved entirely by attention to position. By extension of the limb, and pushing back the femur, we have greatly reduced the inflammation; and whereas the child was before rapidly becoming worse, he is now as rapidly mending. Always treat such displacements in young subjects early and carefully; mere dislocation of the parts will keep up irritation and suppuration, without the presence of any dead bone.—*British Medical Journal.*

FRACTURE OF THE VERTEBRAL COLUMN—REDUCTION OF THE DISPLACED FRAGMENTS—RECOVERY.

The *Bulletin Médical du Nord de la France* records a case of fracture of the vertebral column, in which the displaced fragments—corresponding to the twelfth dorsal and first lumbar vertebræ—were reduced in the following manner:—The injured man was laid upon his face; four assistants made extension by drawing down the inferior extremities, and two others held the body by the arm-pits. Three tractions were necessary, during which the surgeon (M. Parise), employed himself in reducing the fragments, at first by pressure with his fingers, then with the palms of his hands, and, finally, with his knee, leaning with almost the entire weight of his body. The complete paralysis of motion and sensibility of the lower limbs entirely and at once disappeared, and the power of micturition and defecation were restored in a few days. The patient was kept on his back in bed, in a state of absolute immobility, and, at the end of sixty-three days, he was able to get up and walk about the Ward.—*La Tribune Médicale.*

STONE IN THE FEMALE BLADDER; REMOVAL BY DILATATION; RECOVERY.

(Under the care of Mr. COWELL.)

On the 11th ult., Mr. Cowell removed by dilatation a stone from the bladder of a woman sixty years of age. The dilator used was a small one with three blades. The case was one of some interest. The patient had, upwards of two years ago, been in the hospital for some two or three months under the care of Dr. Basham with pyelitis. A few months later she had attended the hospital after passing gravel, accompanied by great pain, and some bleeding after micturition. About twelve months ago she returned to the hospital bringing with her a small piece of bone which she stated had been passed from the bladder. On examination, this proved to be, not human bone, but bone belonging to some animal of the bovine species. There was then considerable doubt as to its having come from the bladder; but three months later she brought two other small pieces of bone, both of which were to some slight degree coated with calcareous deposit. This seemed to set at rest the previous doubt, but it was also certain that this bone must have been introduced into the bladder. The patient had passed no more fragments of bone since, but had returned to the hospital in consequence of continued pain in the back and frequent desire to void urine, an act always followed by severe

pain at the neck of the bladder. The pain was much increased if the patient moved about. The urine was loaded with pus and albumen. Mr Cowell had examined the bladder at Dr. Basham's request, and detected the presence of a stone of moderate size, and, in consequence of the kidney disease, recommended its removal by dilatation rather than lithotrity. The stone was removed readily after moderate dilatation, but its outer layers broke down under the pressure of the forceps, and were brought away in pieces after the extraction of the nucleus, and the bladder was carefully washed out with warm water. The stone was exceedingly friable, of chalky aspect, and composed of successive layers of harder and softer material, the former flaking off easily and in large pieces.

A subsequent examination of the stone showed it to consist almost entirely of phosphate of lime, with a very small amount of uric acid in the harder portions, and the slightest possible trace of ammonio-phosphate of magnesia. No bone was found in the centre of the nucleus, as was suspected might possibly have been the case. The stone weighed 128 grains.

The patient has since done well. There was no incontinence of urine until the fifth day, when the urine escaped involuntarily for about four or five hours. There has been no incontinence since, and the patient has been free from pain. The urine, examined six days after the operation, was of a light-straw colour, of acid reaction, and afforded a light-coloured deposit. It contained some pus, and about one-fourth albumen. Treated by acetic acid, no mucus was found, but the microscope showed a large number of pus-cells and a few blood-corpuscles, but not a single epithelial cell, with the exception of one doubtful renal cell. There were no casts.—*Lancet.*

EXTRACTION OF CATARACT BY GRAEFE'S MODIFIED LINEAR SECTION.

Dr. David Little points out some of the dangers attending Graefe's method, and alludes to the operation proposed by Liebreich (*British Medical Journal*, December 2nd, 1871) for obviating them. He expresses the opinion that the results obtained by Liebreich's operation "are superior to Graefe's, as regards immunity from the worst inflammatory confequences. In performing this operation myself, I have been much pleased with the rapidity and ease with which it can be accomplished, and the comparatively little pain it gives tae patient; at the same time, the great tendency to prolapse of the iris and its ultimate adhesion to more or

less of the corneal wound, besides, the production, probably, of a greater amount of astigmatism than by any other operation, appear to me to be serious objections to it. My experience, however, as yet, is too limited to enable me to speak authoritatively on this point." Dr. Little notices some interesting facts in reference to the cases which form his report: "The 200 operations occurred in 148 individuals, of whom 78 were males and 70 were females; their ages varied from 32 up to 81 years; 115 of the eyes belonged to patients who were sixty years of age and upwards, and it is interesting to observe here, what effect age had upon the result of extraction of these 115 eyes. Eighteen were attacked with iritis (nine of which ended in a closed pupil); two were lost from panophthalmitis, two from irido-choroiditis, and one from sloughing of the cornea. . . . . In fifty-six of the extractions the patients are noted as being marastic, delicate, rheumatic, or as being in bad health.* Of these cases, ten were followed by iritis, five of which terminated in a closed pupil, and five were lost." Here also the state of health is some criterion as regards the prognosis." "In twelve instances both eyes were operated upon at one sitting." As regards the use of an anæsthetic, "chloroform was administered in four cases only. I prefer operating without it if possible, if only for this advantage—that one can more readily and effectually clear the pupil of cortical remnants when the patient is anxious to direct the eye as required." Dr. Little gives the results of his cases, as regards vision, in a tabular form, and says, that—"If we consider those cases that can read from No. 1 to No. 14 (Jaeger) as perfect results, those from No. 16 down to good perception of light as imperfect, and all those the sight of which is destroyed as failures, then we shall have the result of my 200 extractions as follows: 3·5 per cent. of loss; 7·5 per cent. imperfect; 89 per cent. perfect."—*British and Foreign Med. Chir. Review*, Jan., 1873.

TREATMENT OF CHRONIC DISEASES OF THE BLADDER WITH INJECTIONS OF HEALTHY URINE.

In No. 8 of the *Pester Med.-Chir. Presse* for this year, Dr. T. Clemens proposes for the treatment of old disorders of the bladder (such as catarrh, chronic inflammation produced by the unhealthy urine, gravel, &c.) a means which had already suggested itself to his mind four years previously, and which he had since employed with success. His first case was that of a patient whose bladder con-

* One patient was suffering from diabetes for four years' duration; the extraction was completely successful.

tained abnormal urine in a state of putrefaction; after having failed the use of all known remedies, he made injections with fresh and healthy urine, and with the very best results. The author advises to empty the bladder completely, and to wash it out by means of an injection of tepid water, which is allowed to run out after five minutes; a young and well-fed individual is then made to micturate directly and slowly into the syringe, which is previously warmed to 25° (Reaumur). The injected urine is allowed to stay some time in the bladder. The injections must be repeated two or three times in the day. Sometimes an immediate effect is observed, as happened in a case quoted by the author, in which spasm of the bladder disappeared after the first injection.—*Lancet.*

PROGRESS OF THE CASE OF LOUIS St. AUBIN.*

A Paris Correspondent writes *inter alia* as follows:—

It might interest your readers to have the last news of St. Aubin, one of the wounded of Sedan, whose case is given at length by Dr. MacCormack, at p. 107 of his "Notes and Recollections of an Ambulance Surgeon." Dr. Gaede, of Bourbon, Lancy (at the Hospital of which place St. Aubin is at present), writes a long account of the patient's present state, too long to give *in extenso*, but the following is the substance of it. St. Aubin's whole arm is quite useless; no motion whatever, either in elbow or shoulder; the hand is undergoing a process of atrophy, the thumb is the only part not positively motionless; the upper fistulous openings discharge freely; and Dr. Gaede, after a free incision, found it necessary to extract a whole piece of the humerus, seven centimetres long, representing the whole thickness of the humerus. Since then Dr. G. has discovered, in the remaining part of the humerus, a longitudinal fracture, with a splinter shaped fragment, much longer than the above, of which he resected some three centimetres. Sloughing is so abundant and persistent, and so many abscesses have continually formed, that St. Aubin has often begged to be relieved of the useless arm. He has never been able to write with his hand since his wound, but has learnt lately to write with the left, and the long and continuous suffering, as well as the sloughing, have proved a great drain on the man's constitution, which is all but exhausted. Dr. Gaede has been prompted to publish this report (he promises a further one) in the interests of

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In this case, the shoulder and elbow-joints were both excised on the 14th ptember, 1870, in consequence of severe injuries to the right arm from an loding shell.—Ed. I.H.G.

correct surgical statistics. St. Aubin's case having been given as a brilliant example of success, and having obtained a great notoriety owing to Mr. MacCormack's book having been translated into French, and, perhaps, German, it is perhaps well to prevent the whole mass of surgical students in the three countries from being misled by too hasty an estimate of results.—*Irish Hospital Gazette.*

CLINICAL LECTURE ON BED-SORES.

By Sir James Paget, F.R.S., &c., Lecturer on Clinical Surgery at St. Bartholomew's Hospital.

Bed-sores may be defined as the sloughing and mortification or death of a part produced by pressure. When we press on any part of our bodies for a moment, on the removal of the pressure the part is quite white, owing to the blood having been pressed out. The colour immediately returns, however. In bed-sores, the pressure is continual, the blood is driven away, nourishment ceases, and death of the part takes place. There are three different forerunners of bed-sores, (1) inflammation; the prominent parts, *e.g.*, the sacrum, posterior superior spine of the ilium, the trochanters, and the ends of the spines of the vertebræ, are seen to be red. (2) They may be simply pale and white. (3) They may be purple or yellow from the extravasation of blood or bloody fluid. Sloughing follows these in the skin and subcutaneous tissue and fat. These latter die before the skin, sloughing proceeds faster in them, and so when the skin comes away, the place formerly occupied by these tissues is empty. Then the deeper parts die—muscles, bone, until sometimes the spinal cord itself is exposed. Now bed-sores occur in those who are absolutely at rest. If there is the slightest movement from one side to the other bed-sores may be averted. A man with simple fracture of the femur, previously healthy, can move himself slightly from side to side, and does so instinctively. No man with simple fracture of femur ought to rise from his bed with a bed-sore. It would be the consequence of gross neglect if he did. In the case of those whose lower limbs are paralysed, there can be no motion whatever, and so they are liable to bed-sores.

The time when bed-sores begin to make their appearance is about fourteen days—that is, in the case of a healthy man who is absolutely unmoved. They will, of course, be accelerated by dirt, if his urine and fæces are not constantly removed. There are certain cases which are specially favourable for bed-sores:—the old, especially those with fractured neck of femur, and those that are the fattest and heaviest, and most likely to become œdematous.

Among ordinary persons, those that are the thinnest. When, as is commonly said, their bones are ready to start through their skin: the amount of tissues between the skin and projecting point of bone is so small that it soon, as it were, wears away, and bed-sores ensue. Those again in a state of fever, such as the lowest kinds of typhus, can scarcely by any means be saved from them. Their whole system is so poor and degenerated that sloughing takes place without any pressure at all; and you may see the ends of the nose, ears, &c., sloughing from the bad supply of blood. Continuous hectic fever is a state in which they appear, being an exception to the general class of consumptive patients, who, though they may lie in bed for months, rarely have bed-sores. They manage to move slightly and thus avert them. Pyæmia is another source, and is illustrated by a case in the Hospital: a man who was admitted with phlegmonous erysipelas of a limb and was treated for it. On account of some misconduct he was discharged: after a while he came back with pyæmia and an enormous bed-sore. His skin is very pallid and soft and does not properly discharge its functions, and there is every reason to believe that every other organ of his body is in a similar state. His lungs may be auscultated and his urine examined, and nothing at all found wrong with them, and yet I venture to state that neither the lungs or kidneys are performing their functions as they ought A pyæmic subject, being so ill-nourished, is especially liable to bed-sores. Intense fever is also a productive agent. The man, whose thigh was amputated a short time since, had a most acute and intense attack of fever, and large bed-sores appeared. Now the fever is gone, the local disease is removed, and the bed-sores are healing very rapidly. The risk of bed-sores in the old with fractured neck of femur is chiefly in the first week, therefore treatment with a view to preventing them should commence immediately the patient takes to bed. After the first week the risk is not nearly so great. There is one peculiar class in which bed-sores rapidly appear, and that is rapid destruction with inflammation of spinal marrow. If in a fracture of the spine, a portion of the spinal cord, below the seat of fracture be irritated and inflamed, sloughing will ensue in those parts to which the nerves given off below the irritated part proceed. And this will take place in two or three days. Sir B. Brodie mentions a case in which a large slough formed on the heel in twenty-four hours. No doubt there were other causes for this. Two or three days is the usual time. The same takes place in diseases of the spinal cord, especially in acute pyelitis. There is not so much risk of sloughing in parts deprived of nerve force as in parts whose nerve force is irritated and disturbed.

Now let us look at the means of preventing bed-sores, for nine-tenths of your care must be devoted to this; for if once they appear it is very difficult to get rid of them.

First of all, look to the bed. Good bed-making is an indispensable thing in the prevention of bed-sores. Several beds have been made especially for this purpose, of which the best is Dr. Arnott's. It consists of a chest full of water; on the top of this is a waterproof sheet, and over this an ordinary sheet on which the patient is laid. Here the patient is absolutely floating on water. The waterproof sheet is not drawn tight but adapts itself to every part of the patient. A patient might lie on this for years and never have a bed-sore. Inferior to this, but very good, is Hooper's bed. Here the waterproof on the bed is tight. They will avert bed-sores for a long time, but I should not like to say that a patient would never get a bed-sore on them. But you cannot have these everywhere; you can't take them about to everyone who may need them, and there are many cases in which they cannot be used at all, as in cases of fractured neck of femure, acute inflammation of knee-joint, and many others.

In ordinary beds the best thing is an ordinary firm mattress of horse-hair; and it must rest on boards. Cords are the worst possible things as after 24 hours or so they give under the weight of the patient, and the most prominent parts are pressed upon. Iron gives after two or three weeks. Not so boards. It must be quite level. Under the horse-hair it is better if possible to have a spring or straw-mattress. Feather-beds and the like are, of course, to be utterly condemned. If possible, have two beds, so that you may lift the patient into the other when it wants making. You thus avoid making beds under him.

The next thing is to harden the skin. The best application for this is a solution of one part of nitrous ether in three of water. If the back is frequently washed with this, bed-sores may be completely averted. There is in the Hospital a man paralysed in his lower limbs; he has been in this state for ten months. By the good nursing of the sister of his ward bed-sores have been kept away. This application of nitrous ether has been used: solution of one grain of perchloride of mercury, with two drachms of nitrous ether, and six ounces of water, is another good thing. Whiskey is used in Scotland, as is brandy sometimes in England, but these are not so good. In Germany they use a solution of tannic acid. When the parts look as if they were going to slough, these spirit applications may be too strong, and then a solution of gutta percha in chloroform is very useful. Next we have to prevent pressure on those parts where bed-sores are likely to occur.

These are the middle line of the sacrum, after that, in thin persons, the posterior superior spines of the ilium, and the sacro-iliac articulations, then the trochanters of the femur. The chief thing is a frequent change of posture. If a patient can lie in four different positions during the day bed-sores may be prevented. He may lie on his back, each side, and on his face. Of course, you couldn't make a stout person lie on his face; he would simply suffocate. This change prevents the gravitation of the blood. This may easily be seen by looking at the back of a subject in the post mortem room. The back is quite red from this cause.

When patients lie on their backs they may be saved for a time by dividing a mattress and leaving a space of six inches between the halves. You may thus save the sacrum, which will have no pressure on it. The case before referred to was treated so, but sores came on the ilium and trochanters.

Large cushions made of amadou in the shape of a horse shoe are very good. Isinglass plaster or felt water-pillows. Pads of cotton-wool may also be used with advantage. In speaking of the mode of curing bed-sores, already formed, let me remind you to continue your preventive treatment just as if there were none lest they come in other parts.

During the sloughing there is nothing better than a poultice of equal parts of linseed and bread and enough charcoal to have a deodorizing effect. Carrot and turnip poultices are also deodorizing but they are not so good as the first. The poultice is best spread on ordinary tow. When spread on linen &c., folds are liable to form, and if the patient is on these they promote the bed-sore. When slough begins to separate the resin or other stimulating ointment should be spread on the surface of the poultice.

When the slough has separated the sore should be dressed with resin ointment or Peruvian balsam, or equal parts of these in the following manner: little bits of cotton wool should be slightly spread with the ointment, and put into the sore until it is quite full. They thus make an equable soft surface for the sore. These are the chief local means for curing bed-sores. As regards internal treatment, don't stimulate. Let the diet be gentle but good; plenty of milk and bread; little or no meat, and a small quantity of wine.—*The Students' Journal.*

A CASE OF LITHOTOMY, WITH UNUSUALLY RAPID RECOVERY.

(Under the care of Mr. BARWELL.)

Boys under nine years of age recover from the operation of lithotomy more rapidly, as a rule, than older persons, and

children under five generally get well very quickly; beyond twelve years of age, however, convalescence is longer; but the following case is exceptional.

Hubert F——, aged thirteen years and a half, came under the care of Mr. Barwell, with symptoms of stone in the bladder, on July 19th, 1872. On sounding, a calculus, although a small one, was detected without difficulty; but, owing to circumstances unconnected with the case, the operation was postponed until July 27th. The usual lateral operation was rapidly performed, and, as the stone was known to be of small size, only a small opening was made through the prostrate. When the finger was introduced, the stone was felt lying at the back of the bladder, and was readily seized and removed with the forceps. No tube was introduced, but the legs were tied together and the boy put to bed.

July 29th.—No bad symptoms have set in. This morning the boy passed all the urine by the urethra.

31st.—Only a little urine comes by the wound when micturition takes place.

Aug. 3rd.—The wound has quite healed.

5th.—Allowed to get up.

10th.—Discharged well. The wound was healed and the lad was practically well exactly a week after the operation. He was discharged on the day fortnight after, although, owing to certain regulations concerning board days, he remained in the ward until the 13th.—*Lancet.*

CASE OF EMPYEMA LIMITED BY ADHESION; IMPERFECT RELIEF BY NATURAL OPENING; PERSISTENT TEMPERATURE; FREE COUNTER-OPENING; RELIEF.

(Under the care of Dr. RUSSELL.)

This case presents an interesting example of encysted empyema after a severe attack of acute pleurisy. Although a natural opening had established itself in communication with the base of the cavity, and considerable diminution in the size of the cavity must have taken place, yet the communication was too indirect and too limited in extent to empty the cavity completely. A counter-opening, by admitting air, at once allowed the pus to escape, and, as will be seen in the history, the chest rapidly contracted and the discharge ceased. The entire upper lobe was protected by adhesions, and thus free respiration went on within it: it was curious to note clear respiratory sounds over so large a region of

the chest whilst air was audibly admitted within its cavity through the artificial opening at each inspiration. The circumstance which occasioned delay in making the counter-opening afforded opportunity of observing persistent fever temperature, with quickened pulse, kept up for 106 days apparently by the mere presence of pus within the chest, without any morbid action elsewhere; for not only was there absence of any evidence of active disease, but four days after the puncture the temperature fell to normal and the appetite increased greatly.

The patient was a man of perfectly healthy constitution and very temperate habits, aged thirty-five. He was taken with symptoms of acute pleurisy in the left side sixteen weeks before admission. The fever was high and the pain severe, and he kept his bed for seven or eight weeks. On leaving his bed he was very weak, and soon after an abscess began to form beneath the left mamma. It was opened three or four weeks before admission, and a large quantity of pus was evacuated. He had some cough, but no important expectoration.

When admitted, at the end of the sixteenth week, the patient was pale, and had lost flesh considerably, but he took food well, and complained of no ailment excepting a troublesome cough with scanty mucous expectoration. His urine was free from albumen. A small opening existed in the front of the left side of the chest, betweeen the fifth and sixth ribs, just outside the mamma, which directly communicated with the interior of the chest; a variable quantity of pus, often scanty, at times considerable in amount issued from it.

Examination revealed the physical signs of the presence of fluid over the entire posterior region of the left chest; but the entire anterior region and the anterior half of the lateral region were perfectly resonant on percussion, and loud and pure respiratory sounds were audible throughout. On the right side all the physical sounds were those of health.

The diagnosis was at once made of pus within the chest, limited by firm adhesions to the posterior region, the entire upper lobe at the least being protected by adhesions and freely engaging in respiration.

On consultation with his colleagues, Dr. Russell judged it prudent to defer counter-opening, and three months elapsed before the performance of the operation. During this period the patient's health did not suffer more than it had done before his admission, the condition of the chest being unaltered—discharge still proceeding from the opening, and the circumference of the left chest having undergone little if any diminution.

Mr. Bartleet now introduced the aspirator needle behind, within the line of the angles of the ribs, between the eighth and ninth rib, and drew off twenty-six ounces of healthy pus, eight ounces having been previously removed by a syphon tube introduced through the opening in front. The last draw of the aspirator occasioned considerable pain, and the discharge was freely mingled with blood. The puncture by the needle was then enlarged into a free counter-opening, and Mr. Bartleet passed a drainage tube freely perforated at the side from the opening in front through that behind.

During the 106 days which preceded the making of the counter-opening, the temperature, pulse, and respiration had been regularly noted by the clinical assistant, Mr. G. V. Blake. The temperature was persistently above the normal standard. For the first forty-five days the evening temperature was twelve times between 102° and 102·5°, and although subsequently the temperature in the evening ranged between 100° and 101°, it only three times fell within the normal range, and was above 101° within four days of the opening. The morning remissions in the majority of days (sixty three) were within the standard of health. The pulse retained relation to the temperature, but the breathing, though occasionally quickened, ordinarily ranged from 18 to 22. Four days after the opening was made, the temperature fell permanently and completely to the natural standard, and the appetite, not previously bad, underwent such an increase as to surprise the patient. The chest contracted, the ribs became somewhat flattened at their angles, and a slight double curve appeared in the vertebral column.

The counter-opening was made on September 26th, and the drainage-tube was removed on October 30th. The patient is now quite well, with a fresh complexion. The left side of the chest has lost an inch and a half in girth; the left shoulder is depressed one inch, and there is a slight double curve in the spinal column. This of course implies that a large amount of healthy lung exists, as is indeed the case. The sounds of respiration are clear, though rather more feeble than natural, over the entire anterior region of the left chest. It is noteworthy that they have somewhat declined in distinctness since opening, owing probably to the contraction of the chest-wall. Posteriorly the dulness is decidedly lessened and distant; respiratory sound is audible; vocal fremitus has been nearly restored. Physical signs on the right side are still quite normal.—*Lancet.*

Medicine.

DEATH OF A CHILD CAUSED BY INTRODUCTION OF CHYME INTO THE AIR-PASSAGES.

This very interesting case was communicated by Dr. Parrot at the last sitting of the Société de Biologie, and is the second of the kind that he has already observed. The child was aged one year, and after being fed by the bottle, was put to bed at six o'clock and died at midnight, with all the signs of intense dyspnœa. At the post-mortem examination (ten hours after death) the two lower lobes of the lungs were found quite softened, greyish, having a smell of butter, and, in a word, having undergone the action of gastric juice. Altered milk was found in the trachea and bronchi. In this case, the milk contained in the stomach, and which doubtless had been taken in excess, was vomited, and, on account of the horizontal posture, had penetrated into the air-passages. Dr. Parrot drew the attention of his colleagues to the importance of the fact from a medico-legal point of view. He thinks that this occurrence must be rather frequent, as he has already witnessed two cases in his own sphere of observation.—*Lancet.*

Midwifery.

A CASE OF URGENT AND PROLONGED DYSPNŒA COMING ON SUDDENLY AFTER LABOUR.

By J. J. Phillips, M.D., London; Assistant Obstetric Physician to Guy's Hospital; Assistant Physician to the Hospital for Sick Children.

On the 30th December, I was requested to see Mrs.——, aged 36, the wife of a medical man. She had been delivered of her fifth child at two o'clock in the afternoon. The labour was in every respect natural. Nothing untoward was noticed until six o'clock, when she suddenly complained of oppression at the chest, and began to gasp for breath. Her condition soon became most alarming. I saw her in consultation with two or three medical men at nine o'clock. She was sitting up in bed, supported by pillows, and in her husband's arms. The dyspnœa was most urgent:

the respirations were forty-eight per minute ; the pulse, which was said to have been for some time imperceptible, could now be felt beating at the wrist at the rate of one hundred and forty per minute, very small ; the respiratory murmur could be heard over the chest in front and behind ; there was no abnormal sound accompanying the heart's action, but the first sound was muffled ; the legs and the forearms were quite cold ; the lips were livid ; the face was pallid. She endeavoured on one or two occasions to speak, but could only articulate one word at a time. The history of the case and the symptoms seemed to point unmistakably to a coagulum in the pulmonary artery ; and it seemed to us that the treatment should be directed to support the heart's action as much as possible, and this was done by repeated doses of brandy, which with some difficulty were swallowed in soda-water. Five-grain doses, increased to ten grains, of carbonate of ammonia were given at short intervals, and warmth was applied to the extremities. I remained about an hour. The case seemed hopeless. At nine o'clock next morning, however, I found her much relieved. She was able to assume more nearly the horizontal posture ; the extremities were warm ; the breathing was much more easy, and only thirty per minute ; the pulse still very small, 120 per minute ; temperature in the axilla, 97 deg. Fahr. Symptoms of improvement had commenced about four in the morning. Her husband and another medical man, who sat up during the night, believing that the carbonate of ammonia was doing good, had continued its use in increased doses, so that in twelve hours she had taken two hundred and ten grains of it. The stomach tolerated this large quantity in a remarkable manner. "She was a little sick two or three times." The brandy had also been continued, and she had taken a little beef-tea in the early morning. In the evening, she was in much the same condition as in the morning ; frequency of pulse and respiration the same ; temperature only half a degree higher (97.5 deg. Fahr.) She still complained of pain in her chest. During the night some hours of sleep were obtained, and next day she was more comfortable in every respect. The respirations had fallen to from twenty to twenty-five per minute ; temperature, 99 deg. Fahr. ; no abnormal cardiac sound. The strictest rest was maintained. On the sixth day there were some pyrexial symptoms ; and on the seventh she began to suffer from severe sickness. The valuable advice of Dr. Herbert Davies was obtained, and she improved. I saw her again on the twentieth day after labour ; she was still keeping quiet in bed ; and the interruption to convalescence, for which I was desired to see her, was only of a temporary character.

Although I have not headed the above case as one of pulmonary embolism, the history which it presents, and especially the severe symptoms which persisted for so long a time, so closely resemble those observed in fatal cases of obstruction of the pulmonary artery, that it is difficult to explain the case upon any other hypothesis. It is true that in the great majority of cases of the kind the symptoms have rapidly increased in severity, and death has been the inevitable result; but a few cases during the puerperal state are to be found recorded similar to the present case, in which, notwithstanding the threatening character of the symptoms, gradual improvement took place. In analysing the case just reported, it appears probable that a loose clot which had formed in the right side of the heart was driven into the pulmonary artery, giving rise to the urgent dyspnœa which supervened so suddenly. The patient told me that throughout the day she had felt a little shortness of breath. Given that a clot found its way into the pulmonary artery, it is of course quite conjectural what changes took place in it; but it is not improbable that a loose clot might undergo such contraction as to allow the gradual re-establishment of the circulation, coincident with the slow improvement in the general symptoms. Different opinions will doubtless be entertained as to the share which the carbonate of ammonia had in relieving the symptoms, by reducing the hyperinosis of the blood which existed at the time. The large quantity of this alkali which was taken in twelve hours is especially deserving of notice. I am not aware that it has been given continuously for twelve hours in such large doses at such short intervals. Dr. Richardson, in one of his valuable contributions to the subject of thrombosis, gives reasons for administering the liquid ammonia rather than the carbonate: but when this case occurred I had not read Dr. Richardson's remarks on this point. Another fact of interest in the case now reported, is the low temperature which continued throughout the day succeeding the most severe symptoms.

My friend Dr. Playfair, who has written so well on thrombosis and embolism in the puerperal state, in commenting upon a case similar to mine, objects to its being called one of embolism, and says that it should be designated a case of thrombosis. I have, however, preferred to speak of this case as one of embolism, believing that the coagulum was originally formed in the right side of the heart, and then pursued its short course as an embolism into the pulmonary artery, rather than that coagulation occurred *in situ* in the pulmonary artery itself.—*British Medical Journal.*

LIABILITY TO MALPRESENTATION OF THE FŒTUS DURING LABOUR.

By P. J. Molony, B.A., M.B., Waterbeach, Cambridge.

The following cases open up a wide field for inquiry. During the summer of 1872, I was asked by Mrs. M. to attend her in her confinement, which she expected in a few months. She told me that she had already had eight children, all at full time, and that four of the eight had been either breech or footling-presentations—two of each, she thought. About the time she had mentioned I was sent for, and, on making an examination, I found the os half dilated and a breech presenting. All went well, and in half an hour she was delivered of a large male child. On thinking over this case, I remembered that, when a student, I had been sent out from the Maternity Hospital, in which I was taking out my practical midwifery, to attend a woman who, I found on my arrival at her house, had had a breech-presentation in her previous confinement. She was confined soon after my arrival, and, as before, had a breech presentation.

The object of these observations is to induce others to contribute to the solution of the question, Is a woman who has had a breech or footling-presentation at one labour more liable to the same at her subsequent labours than any other woman of the community? It will be seen that I leave shoulder and all cross-presentations out of the question, as they have been more closely investigated, and definite though not similar causes have been assigned for them, as form of the pelvis, obliquity of the spinal column, irregular action of the abdominal muscles and position of the placenta, etc. We confine ourselves to the reversing of the ovid. Churchill gives the number of breech cases in 197,318 deliveries, as 3,325, or one in $59\frac{1}{3}$; and the number of footling or knee-presentations in 192,174 deliveries, as 1,831, or one in about 105; so that there must be something more than chance in one woman having three breech and two footling-presentations in nine deliveries, and another having two successive breech-presentations. Statisticians have given us the percentage of every sort of presentation. Most obstetric writers tell us of the forceps having been used, or the perforator several times with, or the Cæsarean section even having been performed, more than once in the same woman; but none, so far as I am aware, have mentioned the fact of a woman having had an abnormal presentation of the fœtus in more than one labour. If those of our brethern who have a large obstetric practice will give us the benefit of their experience, we shall soon know whether to answer the above question in the negative or in the affirmative.—*British Med. Journal.*

CANADA

Medical and Surgical Journal.

MONTREAL, JUNE, 1873.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO AND ITS DIPLOMA.

In the last number of this journal we reiterated the statement that some of the candidates who had passed the examinations of the College of Physicians and Surgeons of Ontario, and whose names appear as licentiates in the published lists of the College, did not possess a diploma of any kind, and we published extracts from letters we had received from various gentlemen bearing on this subject. We have to announce that since our article went to press two of the gentlemen above referred to have received the coveted document.

It is a setted point, then, that the College does issue a diploma, but this is attended to in such a slip-shod way as to throw discredit on the institution.

It is customary by all similarly constituted bodies either to appoint a special day upon which the graduate receives public acknowledgment, by some public ceremony, of his having passed a successful examination, and at the same time receives his diploma, or the Diploma of the College is presented to him by the presiding officer at the time that he is informed of his success. The candidate looks forward to the possession of the diploma as an evidence of his success; he has earned it, fulfilled all the necessary conditions, and passed the required examinations, he may be on the eve of leaving the country, and requires the diploma as evidence of qualification abroad. Young physicians who purpose practising their profession in Canada, register either in Ontario or in this Province of Quebec prior to entering on the real business of life. It may be that they desire to enter some public service. Having complied with all the rules and regulations of the College or the licensing body of the Province it is not too much to ask for an acknowledgment in the form of a diploma, and this diploma should be given to the successful candidate without delay.

The College of Physicians and Surgeons of Ontario has, however, instituted a new *regime*. The diploma of the College is held

over by the College officials, and is forwarded to the candidate, or to his address, when the Registrar has time to attend to it. It is an after-act of the Registrar, on whom is thrown the onus of keeping track of the licentiate, and as soon as he can make time, or that his inclination leads him, the diploma is despatched. It would appear that this very onerous and all-absorbing labour is a work of time. One of the gentlemen referred to in our last issue received his diploma thirteen months after having paid his money and passed his examination and then only, after having written four letters of remonstrance to the Registrar, to which he received no reply. The request was complied with certainly, but in a manner which reminds us of the parable of the unjust judge and his treatment of the importunate widow, "Lest by her continual coming she weary me."

We hope that these irregularities will cease, and that a new state of things will be introduced. We may state that unsolicited information continues to pour in. That the matter has become a just cause of complaint, and that unless a change is introduced the profession in Ontario will be forced to lay their grievances before the Local Legislature, which may result in an unpleasant investigation before a Committee of the House.

THE REGISTRATION BILL.

We understand that the Registration Bill for the Dominion of Canada, submitted to the House of Commons by the Hon. Mr. Pope, and to which we drew attention in our last, was withdrawn. This is much to be regretted, as it is very desirable that we should be in a position to acquire reliable information concerning the vital statistics of the country. So long as matters are allowed to continue in the present unsatisfactory state, so long will we be unable to ascertain anything positive concerning the mortality of localities, or the increase or decrease of the population by a comparison of births and deaths.

THE LATE SIR GEORGE ETIENNE CARTIER, BART., M.P.

It may be deemed by our readers to be somewhat foreign to the mission of Medical Journalism to notice the death of a Canadian Statesman, nevertheless, it is well to bear in mind that the country has suffered a very severe loss. There are few names that will occupy so prominent a position as that of Cartier in Canadian History. Indeed its very first chapter chronicles the discovery of this land by a former Cartier, a name which must occupy

a prominent place in the annals and the rise of this great country into an important and prosperous nation. We mourn not for the loss of an able political leader, so much as for a true and honest son of the soil. As he was true to himself, to his friends, and to the country of his birth, and withal, though of French extraction, a true Briton, proud of the name and association of the country with whose destiny this Dominion has been and is so intimately connected, his life and political career should be dearly cherished. When the petty jealousies of creed and extraction creep into the councils of political and other leaders, let the memory of George Etienne Cartier be a monitor to arrest clamour and unworthy dissension which can lead to no general good, but which must end in disunion, weakened power and influence. We will not repeat the history of his life, our readers are already familiar with the oft told tale. Sir George E. Cartier was suffering from Bright's disease, and some months since he repaired to England with the hope of receiving benefit by the change of climate and professional advice. His health apparently improved, and he had so far recovered that he was making preparations for his return to his native land, when a change took place in the course of his malady, and he expired on the 20th ultimo, at 6 o'clock in the morning, at the age of 59 years.

Medical News.

THE KILMALCOLM "MURDER" (?)

The case which has been known as the Kilmalcolm murder, and which is almost unique in the records of medical jurisprudence, was tried at Glasgow on the 23rd ultimo before Lord Ardmillan. John Lang was arraigned for the murder of his wife, Margaret Lang, on the morning of the 2nd of January last. The Langs, who inhabited a farmhouse at Killochwraes, had been married nearly forty years, and the evidence went to show that they were sincerely attached to each other. They were both, it would appear, addicted to habits of intemperance, the deceased woman especially so. On New-year's day there had been merry-making at the farm, and a good deal of drinking; and when the Langs retired to bed there is little doubt that they were both considerably the worse for liquor. About one o'clock on the morning of the 2nd of January, John Lang called one of his daughters to come at once, as her mother had been taken ill. This daughter deposed that on going to her

mother's room she found her lying on the floor, supported by her father. She saw blood on the floor where her mother was lying, and she also saw "something else" (a piece of intestine), which she put in a chamber-utensil, and which was afterwards given to the doctor. The medical evidence went to show that the deceased woman had a clean cut wound in the vagina (the exact anatomical seat of which is not given in the report), through which a portion of the intestines, with clean cut ends, protruded. Seven feet seven inches of intestine had been cut off in three pieces, and the evidence went to show that these pieces were all clean cut, and not ragged, at the extremities, and that the intestine had been carefully separated from the mesentery. The woman survived these frightful injuries a whole week, and did not succumb till January 9th, the cause of death being loss of blood and peritonitis.

The difficult question for the Court to determine was, the one of suicide, homicide, or accident. The medical evidence was in favour of homicide, because of the concealed position of the wound, and the deliberation which had been manifested in cutting off the intestine. It was admitted that the injury was *possibly* suicidal, though not *probably*. In favour of suicide, we have the fact that the woman's hands were covered with blood, but the man's were not. Against the theory of murder, too, was placed the man's previous excellent character, and his attachment to his wife. In favour of accident we have the fact that no weapon was discovered with which the injury could have been inflicted. Two pocket-knives, one of which had been recently sharpened, were found in the trousers of the accused, but no sign of blood was found upon either of them, and it was not considered probable that the wound had been produced by either of these weapons. The deceased woman also made a dying declaration on the 5th of January—which was obviously false—to the effect that the injury was caused by her falling on a chair; that no person injured her; and that she and her husband had always lived on friendly terms. The case is certainly a puzzling one, and the utter absence of direct or even circumstantial evidence is very remarkable. The jury returned a verdict of "Not proven," after ten minutes deliberation.

The case is not the least remarkable on account of the long period which the woman survived, such injuries generally proving fatal in a short time from excessive hæmorrhage. Taylor mentions two cases of women who were murdered in Edinburgh some years since by wounds inflicted with razors on the vagina, and he further says that: "this crime appears at one time to have been common in Scotland." This medical jurist holds very decided views as to the nature of such wounds. He says: "When deeply incised

wounds are inflicted upon the genital organs of either sex, the fact of their existence in such a situation at once proves wilful and deliberate malice on the part of the assailant. Accident is wholly out of the question, and suicide is improbable except in the case of confirmed idiocy and lunacy." In a state of intoxication a woman may be practically an idiot or a lunatic, and we hold that it is very decidedly within the bounds of probability that the primary wound was self-inflicted. A comparatively trifling degree of traction will cause the bowel to separate from the mesentery (and separation in this way would account for the slight amount of hæmorrhage), and the bowel having been pulled out it is possible that an ignorant, half-intoxicated man may have cut this "something" off.—*The Lancet.*

CICATRICAL KELOID OF THE CERVIX UTERI.

At a recent meeting of the *Société de Chirurgie*, of Paris, M. Cazin read a paper on two cases of cicatrical keloid of the neck of the womb. The first case occurred in a woman, twenty-two yearsof age, who had had a child at the age of eighteen years, and had never had syphilis. On examination, the cervix was painful to the touch, and appeared covered with elevations. The speculum showed that these elevations were of a triangular form, and of a nacreous white appearance; they were hard, insensible, from two to four millimetres in diameter, and six in number. The patient had formerly been under treatment for metritis, and had had leeches applied to the cervix. Histological examination showed that cicatrical tissue had formed there now. The elevations were nothing else than the hypertrophied cicatrices of the leech-bites. The second patient, aged forty, was the mother of seven children, of whom the last was seven years of age. M. Cazin had applied the cautery to the cervix for the treatment of an obstinate ulceration, which was rebellious to all other methods of cure. The woman has now a keloid of the posterior lip of the cervix, in the position where the cauterization was applied some years since.—*Gaz. Hebdomadaire*, No. 44.

The municipality of Berlin, alarmed at the 139 cholera cases at St. Petersburg since March, is preparing for the repulse of the disease. Meanwhile typhus fever abounds in the North German capital. Drainage operations, so loudly demanded by the Berliners, are about to commence, and a loan of £3,500,000 has been raised to carry them out.

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The Montreal medical journal

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